

RD-A123 331

193088 MLRS MISSILE NUMBERS BC-107 BC-109 BC-112 ROUND
NUMBERS V-372/PQ-9. (U) ARMY ELECTRONICS RESEARCH AND
DEVELOPMENT COMMAND WSMR NM ATM. D C KELLER NOV 82

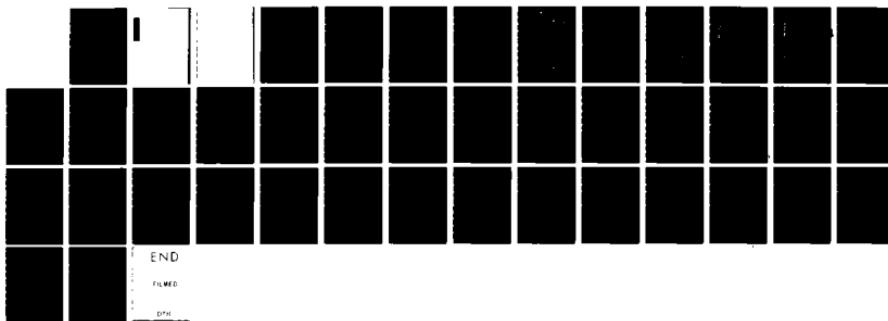
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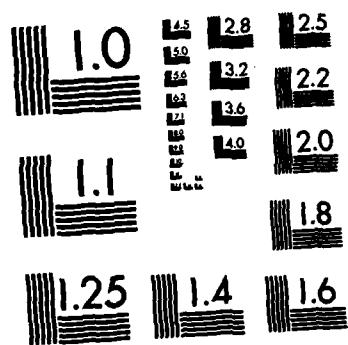
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MICROCOPY RESOLUTION TEST CHART
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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 19308B MLRS, Missile Numbers BC-107, BC-109, BC-112, Round Numbers V-372/PQ-97, V-373/PQ-98, V-374/PQ-99 are presented in tabular form.		

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INTRODUCTION

19308B MLRS, Missile Numbers BC-107, BC-109 and BC-112, Round Numbers V-372/PQ-97, V-373/PQ-98 and V-374/PQ-99, were launched from Brillo, White Sands Missile Range (WSMR), New Mexico, at 1545:02, 1545:06 and 1545:11 MST, 30 Nov 82. The scheduled launch times were 1530, 1530:04.5 and 1530:09 MST.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the Brillo Met Site at T-0 minutes.

(2) Anemometer data were provided from existing tower-mounted anemometers at Brillo. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from pilot-balloon observations at:

SITE AND ALTITUDE

D-3 $\frac{1}{2}$ 2 km

DEADHORSE 2 km

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

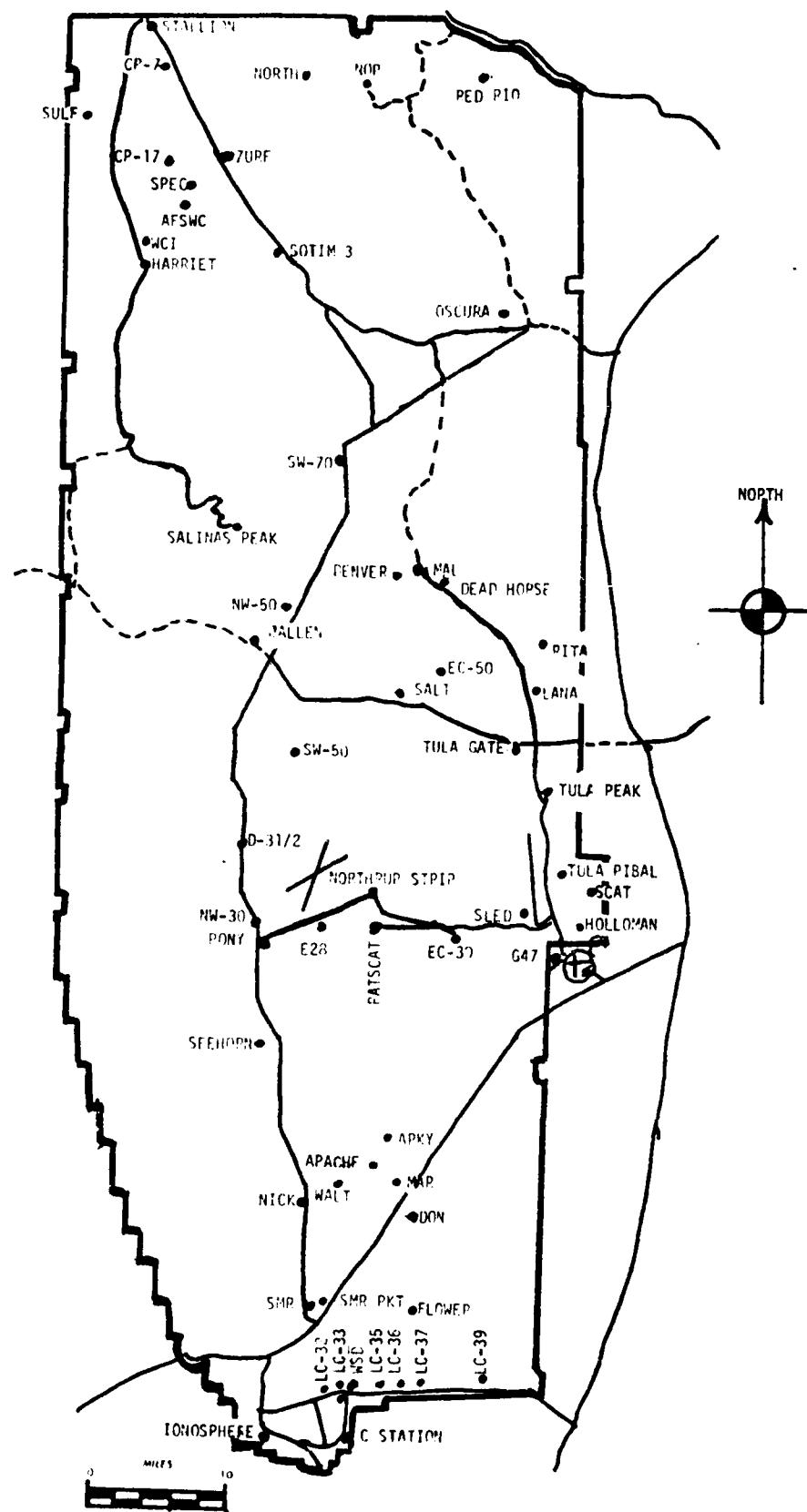
SITE AND TIME

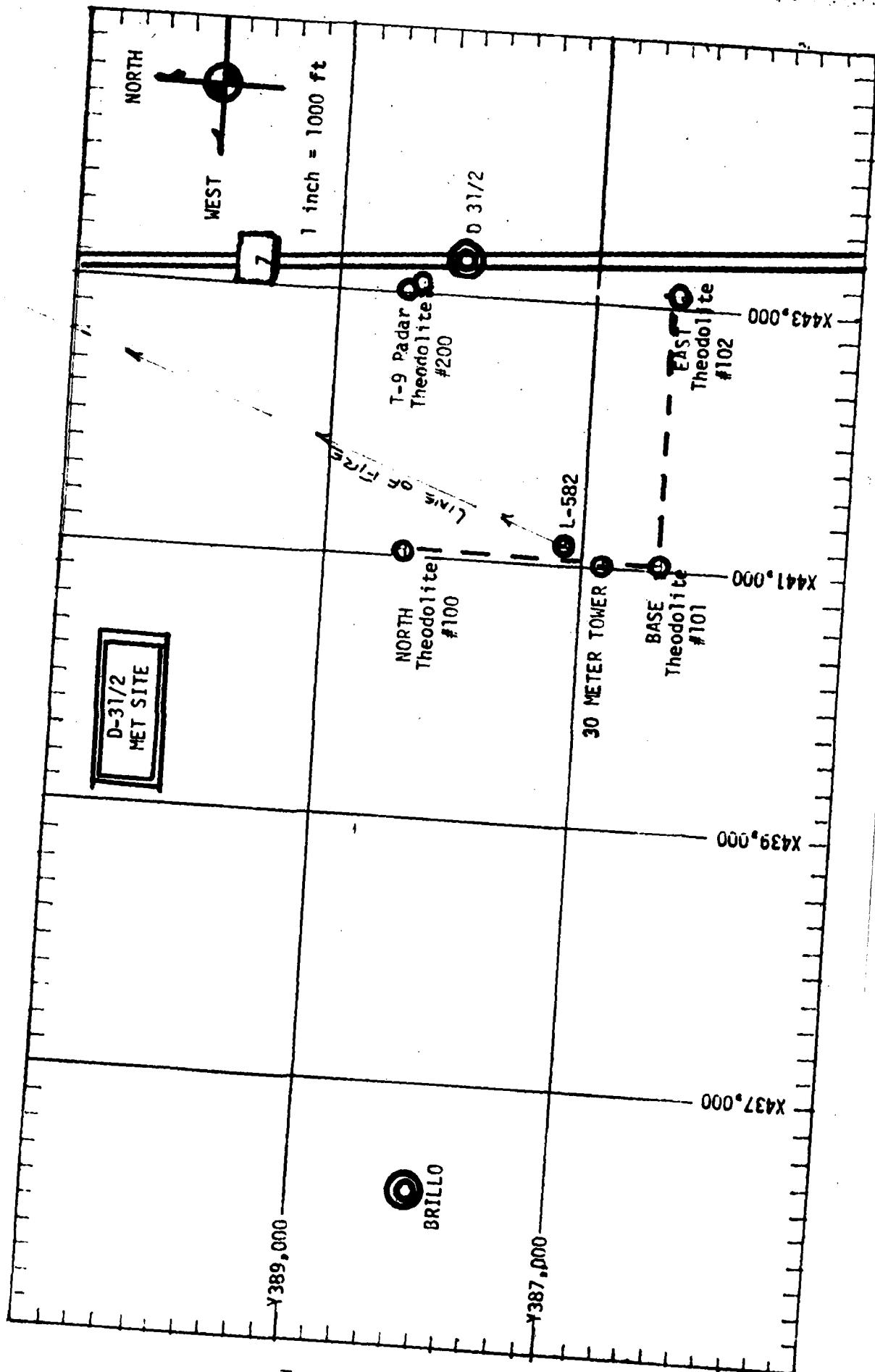
E-28 1230 MST

NW-30 1330 MST

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DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Avail and/or	
Dist	Special
A	

WSMR METEOROLOGICAL SITES





PROJECT SURFACE OBSERVATION

TABLE 1

DATE	30 NOV 1963	82 FEET	Y = 443,023.73	Y = 388,397.95	H = 3972.63				
TIME	PRESSURE inches	TEMPERATURE in °C	DEN. POINT in °C	RELATIVE HUMIDITY in %	SENSITIVITY in mm	DIRECTION in degs	WIND SPEED in kts	CHARACTER	VISIBIL- ITY
1545	868.7	14.3	2.4	45	1051	210	12		40

OBSTRUCTION TO VISIBILITY	CLOUDS					REMARKS						
	1st LAYER	2nd LAYER	3rd LAYER	4th LAYER	5th LAYER							
AMT	TYPE	HGT	AMT	TYPE	HGT	AMT	TYPE	HGT	AMT	TYPE	HGT	
NONE	6	SC	4500	3	AS	10,000	1	CS	24,000			

PSYCHROMETRIC COMPUTATION

TIME: MST	1545		
DRY BULB TEMP.	14.3		
WET BULB TEMP.	8.1		
WET BULB DEPR.	6.2		
DEN. POINT	2.4		
RELATIVE HUMID.	45		

TABLE 2

Anemometer Data - 30 FT. Level of 30 Meter Tower

X= 441,018.71 Y= 386,849.19 H= 4,004.80 (BASE)

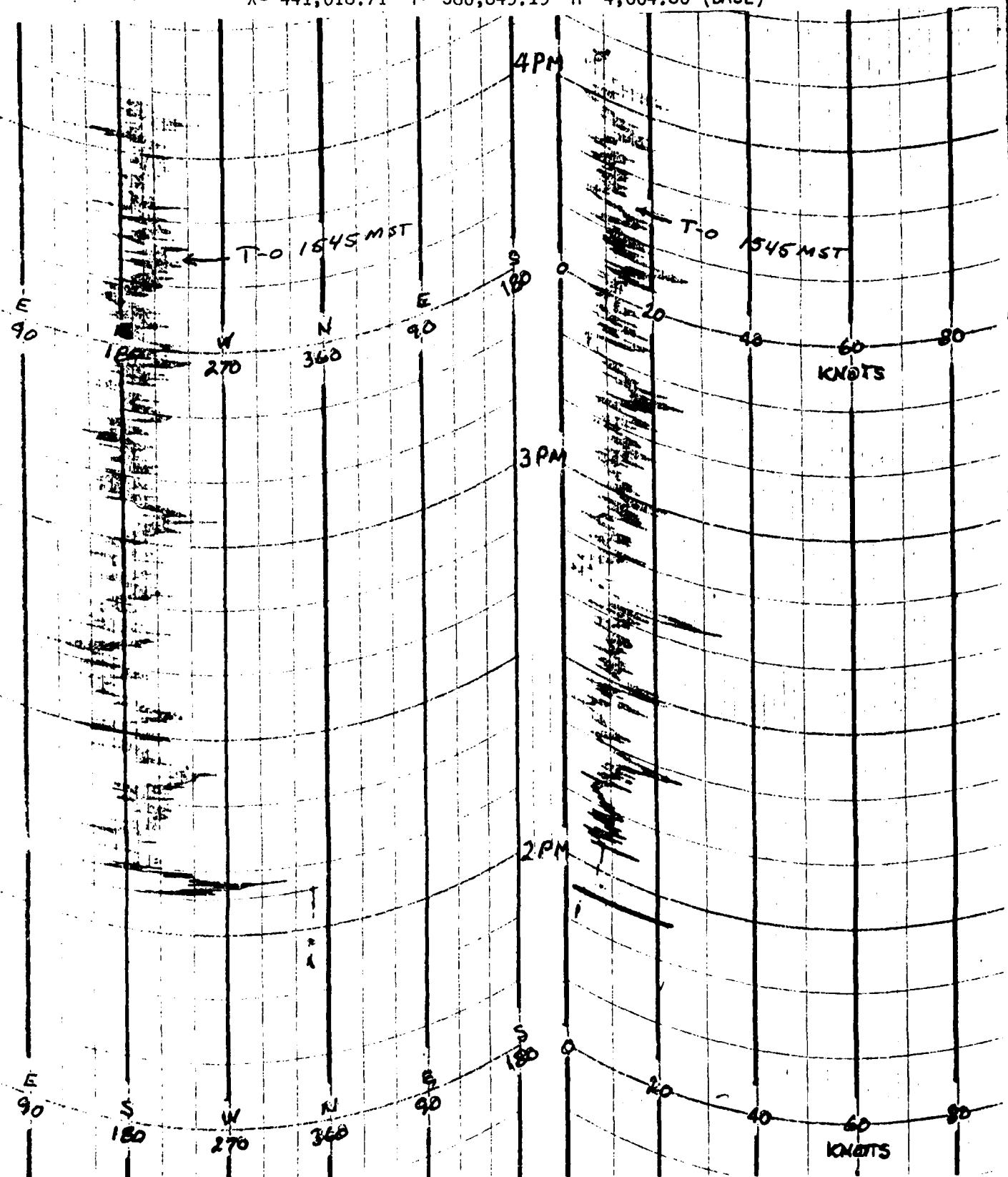


TABLE 3

Anemometer Data at 60 FT. Level of 30 Meter Tower

X = 441,018.71 Y = 386,849.19 H = 4,004.80 (BASE)

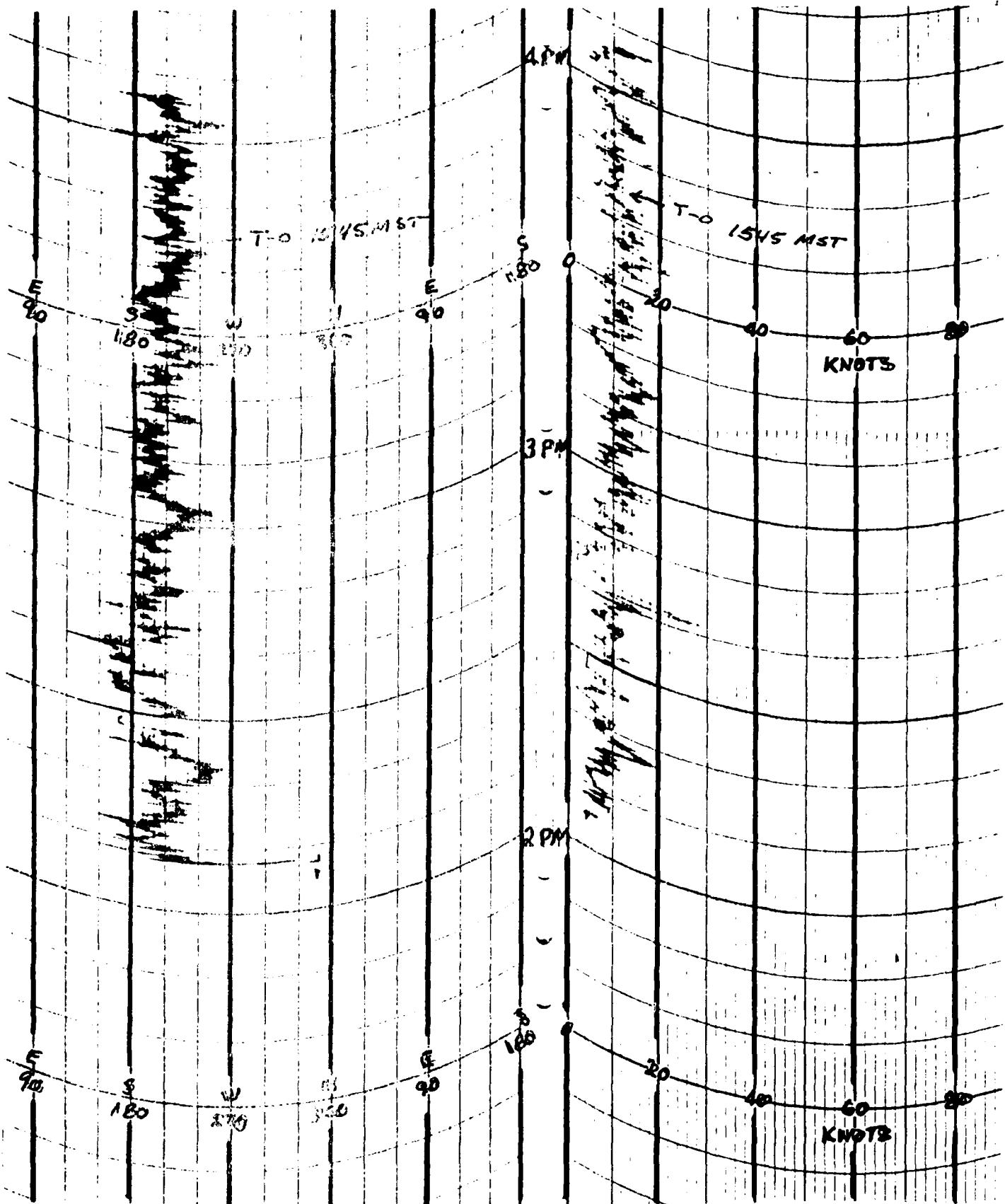


TABLE 4

Anemometer Data - 90 FT Level of 30 Meter Tower

X= 441,018.71 Y= 336,849.19 H= 4,004.80 (BASE)

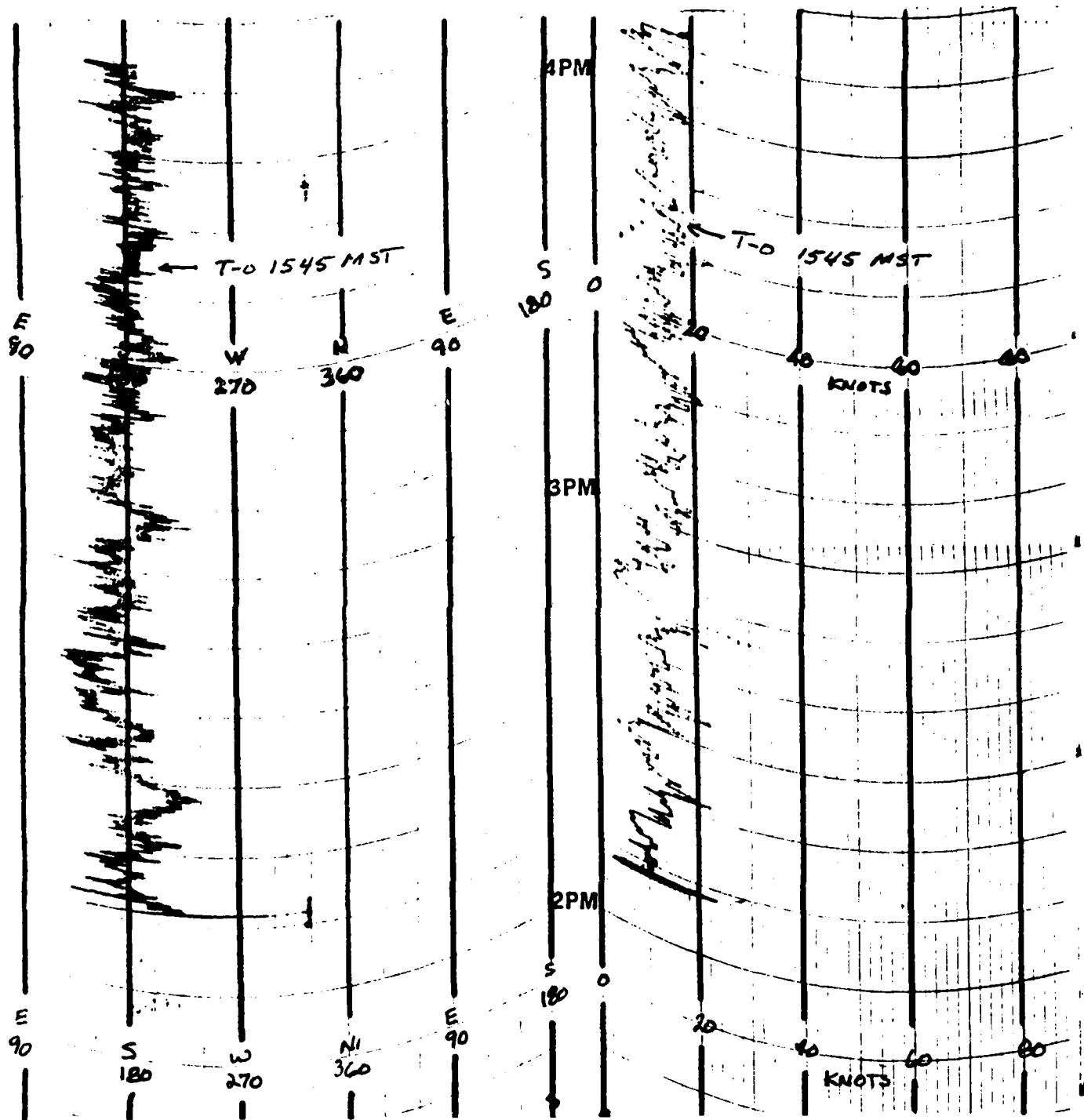


TABLE 5

7-DAY PILOT-BALLOON MEASURED WIND DATA

DATE 30 Nov 82

SITE: D-3½
 TIME: 1545 MST
 WSTM COORDINATES:
 X = 443,023.73
 Y = 388,397.95
 H = 3,972.63

SITE: DEADHORSE
 TIME 1530 MST
 WSTM COORDINATES:
 X = 519,982.11
 Y = 490,249.23
 H = 4,133.72

LAYER	MIDPOINT	DIRECTION	SPEED	LAYER	MIDPOINT	DIRECTION	SPEED
METERS AGL	DEGREES	KNOTS		METERS AGL	DEGREES	KNOTS	
SURFACE	210	12		SURFACE	170	10	
150	186	19		150	192	20	
210	186	21		210	194	23	
270	189	20		270	194	25	
330	194	20		330	194	27	
390	197	19		390	194	28	
500	201	17		500	195	28	
650	197	21		650	194	26	
800	192	28		800	194	25	
950	191	31		950	199	27	
1150	194	32		1150	212	27	
1350	196	35		1350	226	26	
1550	206	37		1550	236	30	
1750	208	41		1750	247	40	
2000	205	32		2000	246	51	

All data obtained from Single Theodolite Tracked pilot-balloon observations.

TABLE 6

AIMING COMPUTER MET MESSAGES

30 Nov 82

E-28	1230 MST	NW-30	1330 MST
METCM1329064		METCM1329065	
301950119873		302050122871	
00338012	28910873	00338018	28860871
01395013	28600862	01383017	28720860
02386016	28370837	02385019	28410835
03386014	27980797	03377025	27990795
04401016	27490750	04375019	27500748
05423028	27190704	05415026	26980703
06444035	26930661	06439043	26800660
07449038	26620621	07426048	26620619
08456037	26360582	08433039	26250580
09467031	25960545	09453043	26030544
10478033	25600510	10454047	25610509
11476030	25250477	11448045	25150476
12475035	24690431	12452044	24500429
13477045	23800374	13475044	23730373
14497049	23090324	14479060	22880322
15504045	22590279	15481071	22360277
16504054	22260240	16494082	22250238
17492053	21910205	17473067	22010204
18476055	22190176	18475077	22030175
19465046	21910151	19457056	21990150
20452050	21550129	20438052	21420128
21460053	21590110	21457049	21030109
22421044	21320094	22431044	21220093
23432031	21000080	23401018	21270079
24443021	21070068	24439017	21120068
25430020	21260058	25404011	21420058
26424017	21580050	26382010	21410049

STATION ALTITUDE 3912.75 FEET MSL
ELEV. -2 1230 hrs 1373
1000 42 47 173

SIGNIFICANT LEVEL DATA
3340290173
EAST-28/CHERRY
TABLE 7

GEOGRAPHIC COORDINATES
52°49'27" LAT UEG
136°40'51" LONG UEG

STATION	ALTITUDE FEET MSL	GEODETIC ALTITUDE FEET MSL	DEOMETRIC ALTITUDE FEET MSL	TEMPERATURE AIR CPOINT DEGREES CELSIUS	REL.HUM. PERCENT
872.6	3912.7	14.7	2.2	53.0	
671.4	3950.9	12.7	2.6	50.6	
650.0	4634.5	11.0	4.4	47.0	
829.8	5587.8	8.2	1.3	53.0	
781.5	6409.8	4.2	1.0	66.0	
757.0	7758.1	1.7	1.1	76.0	
730.5	8376.5	.1	1.6	82.0	
724.9	8900.8	-1.2	2.4	74.0	
716.0	9151.6	-1.1	1.3	70.0	
714.0	9265.1	-1.0	1.3	62.0	
708.7	9493.6	-1.1	1.3	60.0	
700.0	9816.9	-2.4	1.7	61.0	
688.5	10249.3	-2.4	1.4	46.0	
668.1	111632.0	-3.8	1.3	49.0	
658.6	11403.4	-4.4	1.0	57.0	
655.9	11509.8	-4.4	1.3	50.0	
646.6	11879.2	-5.0	1.5	44.0	
640.9	12107.8	-5.6	1.3	55.0	
637.1	12260.9	-6.2	1.9	64.0	
610.2	13367.1	-8.1	1.1	62.0	
502.7	13683.0	-8.0	-17.0	48.0	
590.9	14187.6	-8.7	-19.5	41.0	
547.5	16113.6	-13.5	-24.4	39.0	
530.6	16895.3	-15.3	-26.9	36.0	
500.0	18362.1	-18.4	-29.7	36.0	
466.2	20068.6	-21.8	-35.7	27.0	
430.1	22002.7	-26.4	-41.2	23.0	
418.3	22662.4	-27.7	-42.0	24.0	
400.0	23713.9	-30.8	-42.9	29.0	
367.3	25682.1	-36.6	-44.4	44.0	
361.4	26050.6	-37.6	-42.8	58.0	
349.2	26128.1	-39.0	-43.2	64.0	
328.1	28224.7	-42.4			
316.1	29052.9	-42.8			
300.0	30207.9	-45.2			
273.4	32235.8	-48.1			
270.4	32475.5	-47.6			
257.0	33576.3	-49.6			
250.0	34170.5	-50.5			
242.6	34815.3	-50.9			

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 02 1230 HRS, MST
ASCENSION NO. 173

SIGNIFICANT LEVEL DATA
3340290173
EAST-23°/CHERRY
TABLE 7 Cont'd

GEODETTIC COORDINATES
32.89927 LAT DEG
136.40591 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
234.6	35535.8	-49.9	
208.3	38070.6	-54.5	
200.0	38927.5	-55.0	
186.2	40437.2	-53.7	
175.7	41679.6	-49.1	
163.4	43239.9	-51.6	
156.4	44170.1	-54.4	
150.0	45053.2	-54.1	
144.7	45814.0	-54.1	
134.2	47397.4	-56.9	
118.6	49962.6	-59.6	
110.3	51473.8	-55.5	
100.0	53519.9	-58.8	
77.4	58762.3	-64.1	
70.0	60000.4	-62.7	
56.2	65295.6	-60.3	
50.0	67725.1	-56.4	
44.2	70297.2	-58.8	
38.6	73109.7	-58.6	
36.1	74507.5	-56.5	
30.0	78383.2	-57.4	

STATION ALTITUDE 3912.75 FFET MSL
30 NOV. 12 1230 HRS. EST
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8

GEODETIC COORDINATES
32°89927 LAT DEG
136°40591 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	SPEED OF SOUND KNOTS METER	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3912.7	872.6	14.7	53.0	1052.0	662.2	1.000275
4000.0	859.8	12.6	49.8	1057.2	659.6	1.000269
4100.0	860.7	12.3	49.3	1054.3	659.3	1.000268
4200.0	863.5	12.1	48.9	1051.5	658.9	1.000266
4300.0	860.4	11.8	48.5	1048.7	658.6	1.000265
4400.0	857.3	11.6	48.0	1045.8	658.3	1.000264
4500.0	854.2	11.3	47.6	1043.0	658.0	1.000262
4600.0	851.1	11.1	47.2	1040.2	657.7	1.000261
4700.0	848.0	10.8	47.4	1037.4	657.4	1.000260
4800.0	844.9	10.5	48.0	1034.7	657.0	1.000259
4900.0	841.8	10.2	48.7	1032.0	656.7	1.000259
5000.0	838.7	9.9	49.3	1029.3	656.4	1.000258
5100.0	835.6	9.6	49.9	1026.6	656.0	1.000257
5200.0	832.6	9.3	50.6	1023.9	655.7	1.000256
5300.0	829.5	9.0	51.2	1021.3	655.3	1.000255
5400.0	826.5	8.8	51.8	1018.6	655.0	1.000255
5500.0	823.4	8.5	52.4	1015.9	654.6	1.000254
5600.0	820.4	8.2	53.1	1013.3	654.3	1.000253
5700.0	817.4	7.9	54.1	1010.6	653.9	1.000253
5800.0	814.4	7.6	55.1	1008.0	653.6	1.000252
5900.0	811.3	7.3	56.1	1005.3	653.2	1.000252
6000.0	808.3	7.0	57.1	1002.7	652.9	1.000251
6100.0	805.3	6.7	58.0	1000.0	652.5	1.000250
6200.0	802.4	6.3	59.0	997.4	652.2	1.000250
6300.0	799.4	6.0	60.0	994.8	651.8	1.000249
6400.0	796.4	5.7	61.0	992.2	651.5	1.000248
6500.0	793.5	5.4	62.0	989.6	651.1	1.000248
6600.0	790.5	5.1	63.0	987.0	650.8	1.000247
6700.0	787.6	4.8	63.9	984.4	650.4	1.000246
6800.0	784.7	4.5	64.9	981.8	650.0	1.000246
6900.0	781.8	4.2	65.9	979.3	649.7	1.000245
7000.0	778.9	3.9	67.1	976.6	649.3	1.000244
7100.0	775.9	3.6	68.2	974.0	649.0	1.000244
7200.0	773.0	3.3	69.4	971.4	648.7	1.000243
7300.0	770.1	3.1	70.6	968.8	648.3	1.000243
7400.0	767.2	2.8	71.8	966.2	648.0	1.000242
7500.0	764.4	2.5	73.0	963.6	647.6	1.000241
7600.0	761.5	2.2	74.1	961.0	647.3	1.000241
7700.0	758.7	1.9	75.3	958.5	646.9	1.000240
7800.0	755.8	1.6	76.4	955.8	646.6	1.000239

STATION ALTITUDE 3912.75 FEET NSL
30 NOV. 02 1230 HRS MST
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8 Cont'd

GEOMETRIC ALTITUDE METERS	PRESSURE MILLIBARS	TEMPERATURE DEGREES, CENTIGRADE	AIR DEWPOINT DEGREES, CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	INDEX OF REFRACTION
7900.0	752.9	1.3	-2.2	77.4	953.1	646.3	222.0	16.4
8000.0	750.1	1.1	-2.3	78.3	950.4	646.0	222.0	17.0
8100.0	747.3	.8	-2.3	79.3	947.7	645.7	222.9	17.6
8200.0	744.5	.6	-2.4	80.3	945.1	645.4	224.1	18.2
8300.0	741.6	.3	-2.5	81.3	942.4	645.1	225.3	18.7
8400.0	738.8	0	-2.7	81.6	939.7	644.7	226.3	19.3
8500.0	736.0	-.2	-3.2	80.1	937.1	644.4	227.4	19.8
8600.0	733.2	-.5	-3.7	78.6	934.5	644.1	229.1	20.2
8700.0	730.5	-.7	-4.2	77.1	931.8	643.8	230.6	20.6
8800.0	727.7	-1.0	-4.7	75.5	929.2	643.5	232.1	21.0
8900.0	724.9	-1.2	-5.2	74.0	926.6	643.1	233.6	21.4
9000.0	722.2	-1.2	-5.5	72.4	923.0	643.0	234.6	21.9
9100.0	719.4	-1.1	-5.7	70.8	919.4	643.2	235.3	22.5
9200.0	716.7	-1.1	-6.5	66.6	915.8	643.3	235.9	23.1
9300.0	714.0	-1.0	-7.4	61.7	912.2	643.3	236.5	23.7
9400.0	711.2	-1.1	-7.6	60.8	908.9	643.2	237.1	24.3
9500.0	708.5	-1.1	-7.9	60.0	905.7	643.2	237.6	24.8
9600.0	705.8	-1.5	-8.1	60.3	903.4	642.7	238.4	25.4
9700.0	703.1	-1.6	-8.4	60.6	901.1	642.3	239.1	25.9
9800.0	700.5	-2.1	-8.6	60.9	898.8	641.9	239.7	26.5
9900.0	697.8	-2.2	-9.3	58.1	895.8	641.7	240.5	27.0
10000.0	695.1	-2.3	-10.2	54.6	892.6	641.7	241.8	27.6
10100.0	692.4	-2.3	-11.0	51.2	889.4	641.6	243.2	28.2
10200.0	689.8	-2.4	-11.9	47.7	886.3	641.5	244.4	28.8
10300.0	687.2	-2.5	-12.4	46.2	883.3	641.3	245.6	29.5
10400.0	684.5	-2.7	-12.5	46.6	880.5	641.1	246.5	30.0
10500.0	681.9	-2.8	-12.6	47.0	877.7	640.9	247.2	30.4
10600.0	679.3	-3.0	-12.6	47.3	874.9	640.7	247.8	30.8
10700.0	676.7	-3.2	-12.7	47.7	872.1	640.5	248.4	31.3
10800.0	674.1	-3.4	-12.8	48.1	869.4	640.3	249.0	31.7
10900.0	671.5	-3.6	-12.8	48.5	866.6	640.1	248.9	32.1
11000.0	668.9	-3.7	-12.9	48.9	863.9	639.8	248.9	32.6
11100.0	666.4	-3.9	-12.7	50.5	861.1	639.7	248.8	33.0
11200.0	663.8	-4.1	-12.3	52.6	858.2	639.5	248.7	33.5
11300.0	661.2	-4.2	-11.9	54.8	855.4	639.3	248.9	34.0
11400.0	658.7	-4.4	-11.6	56.9	852.6	639.1	249.2	34.6
11500.0	656.1	-4.4	-13.1	50.6	849.4	639.1	249.5	35.3
11600.0	653.6	-4.5	-13.7	48.5	846.7	638.9	249.8	35.9
11700.0	651.1	-4.7	-14.3	46.9	844.0	638.7	250.1	36.5
11800.0	648.6	-4.9	-14.9	45.3	841.3	638.5	250.6	37.0

STATION ALTITUDE 3912.75 FT. T MSL
30 NOV. 1962 1230 HRS AST
ASCENSION NO. 175

UPPER AIR DATA
3340290175
EAST-28/CHERRY
TABLE 8 Cont'd

GEODETIC COORDINATES
32°59'27" LAT UEG
136°40'59" LON DEG

GEODETIC PRESSURE ALTITUDE MSL FEET	GEODETIC PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	SPEED OF SOUND METER KM/CUBIC METER	WIND DATA DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INFLX OF REFRACTION
11900.0	640.1	-5.1	-15.1	45.0	838.6	638.2	37.4
12000.0	643.6	-5.3	-14.1	49.8	836.1	638.0	37.4
12100.0	641.1	-5.6	-13.2	54.6	833.6	637.7	37.9
12200.0	638.6	-6.0	-12.4	60.4	831.5	637.2	38.3
12300.0	636.1	-6.3	-12.0	63.9	829.1	636.9	38.4
12400.0	633.7	-6.4	-12.1	63.7	826.5	635.7	38.4
12500.0	631.2	-6.6	-12.3	63.6	823.8	635.5	38.2
12600.0	628.7	-6.8	-12.5	63.4	821.1	636.3	38.2
12700.0	626.3	-7.0	-12.7	63.2	818.5	636.1	38.1
12800.0	623.8	-7.1	-12.9	63.0	815.8	635.8	38.1
12900.0	621.4	-7.3	-13.1	62.8	813.2	635.6	38.0
13000.0	619.0	-7.5	-13.3	62.7	810.6	635.4	37.9
13100.0	616.6	-7.6	-13.5	62.5	807.9	635.2	37.8
13200.0	614.2	-7.8	-13.7	62.3	805.3	635.0	37.5
13300.0	611.8	-8.0	-13.9	62.1	802.7	634.8	37.1
13400.0	609.4	-8.1	-14.3	60.5	799.9	634.7	36.8
13500.0	607.0	-8.1	-15.2	56.1	796.8	634.7	36.5
13600.0	604.7	-8.0	-16.2	51.7	793.7	634.7	36.5
13700.0	602.3	-8.0	-17.1	47.8	790.6	634.7	36.7
13800.0	599.9	-8.0	-17.6	46.4	788.0	634.5	37.3
13900.0	597.6	-8.3	-18.6	45.0	785.3	634.3	37.6
14000.0	595.3	-8.4	-18.6	43.6	782.7	634.1	37.9
14100.0	592.9	-8.6	-19.1	42.2	780.1	633.9	38.3
14200.0	590.6	-8.7	-19.6	41.0	777.5	633.8	38.7
14300.0	588.3	-9.0	-19.8	40.9	775.1	633.5	39.0
14400.0	585.9	-9.2	-20.1	40.8	772.8	633.1	39.4
14500.0	583.6	-9.5	-20.3	40.7	770.5	632.8	39.2
14600.0	581.3	-9.7	-20.6	40.6	768.2	632.5	38.9
14700.0	579.0	-10.0	-20.8	40.5	765.9	632.2	38.7
14800.0	576.7	-10.2	-21.1	40.4	763.6	631.9	38.5
14900.0	574.5	-10.5	-21.4	40.3	761.3	631.6	38.1
15000.0	572.2	-10.7	-21.6	40.2	759.0	631.3	37.6
15100.0	569.9	-11.0	-21.9	40.1	756.8	631.0	37.6
15200.0	567.7	-11.2	-22.1	39.9	754.5	630.7	37.7
15300.0	565.4	-11.5	-22.4	39.8	752.2	630.4	37.9
15400.0	563.2	-11.7	-22.6	39.7	750.0	630.1	37.3
15500.0	561.0	-12.0	-22.9	39.6	747.7	629.8	37.7
15600.0	558.8	-12.2	-23.1	39.5	745.5	629.5	37.0
15700.0	556.5	-12.5	-23.4	39.4	743.3	629.2	37.2
15800.0	554.3	-12.7	-23.6	39.3	741.1	628.9	37.4

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 32 1230 HRS. AST
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8 Cont'd.

GEODETIC COORDINATES
32.09927 LAT DEG
136.40591 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	AIR DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	INDEX OF REFRACTION
15900.0	552.2	-13.0	-23.9	39.2	738.8	628.6	261.9	31.6
16000.0	550.0	-13.2	-24.2	39.1	736.6	628.3	262.2	31.8
16100.0	547.8	-13.5	-24.4	39.0	734.4	628.0	262.6	32.1
16200.0	545.6	-13.7	-24.7	38.7	732.2	627.7	262.9	32.4
16300.0	543.4	-13.9	-25.0	38.3	729.9	627.4	263.4	32.7
16400.0	541.2	-14.2	-25.4	37.9	727.6	627.1	264.3	33.2
16500.0	539.1	-14.4	-25.7	37.5	725.4	626.8	265.2	33.7
16600.0	536.9	-14.6	-26.0	37.1	723.1	626.6	266.1	34.2
16700.0	534.8	-14.9	-26.3	36.7	720.9	626.3	267.0	34.8
16800.0	532.6	-15.1	-26.6	36.4	718.6	626.0	267.7	34.4
16900.0	530.5	-15.3	-27.0	36.0	716.4	625.7	268.4	33.8
17000.0	528.4	-15.5	-27.1	36.0	714.1	625.5	269.2	33.3
17100.0	526.2	-15.7	-27.3	36.0	711.8	625.2	270.0	32.8
17200.0	524.1	-15.9	-27.5	36.0	709.5	624.9	270.4	32.3
17300.0	522.0	-16.2	-27.7	36.7	707.2	624.7	270.3	31.8
17400.0	519.9	-16.4	-27.9	36.0	705.0	624.4	270.2	31.3
17500.0	517.8	-16.6	-28.1	36.0	702.7	624.2	270.1	30.8
17600.0	515.7	-16.8	-28.3	36.0	700.4	623.9	270.0	30.3
17700.0	513.6	-17.0	-28.5	36.0	698.2	623.6	268.5	30.4
17800.0	511.5	-17.2	-28.7	36.0	695.9	623.4	268.9	30.5
17900.0	509.4	-17.4	-28.8	36.0	693.7	623.1	265.4	30.6
18000.0	507.4	-17.6	-29.0	36.0	691.5	622.9	263.9	30.8
18100.0	505.3	-17.8	-29.2	36.0	689.3	622.6	263.0	30.8
18200.0	503.3	-18.1	-29.4	36.0	687.0	622.3	262.6	30.8
18300.0	501.3	-18.3	-29.6	36.0	684.8	622.1	262.1	30.8
18400.0	499.2	-18.5	-29.9	35.8	682.6	621.8	261.7	30.7
18500.0	497.2	-18.7	-30.2	35.3	680.4	621.6	261.3	30.7
18600.0	495.1	-18.9	-30.5	34.7	678.1	621.3	262.2	30.8
18700.0	493.1	-19.1	-30.9	34.2	675.9	621.1	263.1	30.9
18800.0	491.1	-19.3	-31.2	33.7	673.6	620.8	264.0	31.1
18900.0	489.1	-19.5	-31.5	33.2	671.4	620.6	264.6	31.2
19000.0	487.1	-19.7	-31.9	32.6	669.2	620.3	265.4	31.3
19100.0	485.1	-19.9	-32.2	32.1	667.0	620.1	265.4	31.2
19200.0	483.1	-20.1	-32.6	31.6	664.8	619.9	265.3	31.2
19300.0	481.1	-20.3	-32.9	31.1	662.6	619.6	265.3	31.1
19400.0	479.2	-20.5	-33.3	30.5	660.4	619.4	265.3	31.1
19500.0	477.2	-20.7	-33.6	30.0	658.2	619.1	265.3	31.1
19600.0	475.2	-20.9	-34.0	29.5	656.1	618.9	265.3	31.1
19700.0	473.5	-21.1	-34.3	28.9	653.9	618.6	265.3	31.2
19800.0	471.4	-21.3	-34.7	28.4	651.7	618.4	265.3	31.2

STATION ALTITUDE 3912.75 FT. T MSL
30 NOV. 82 1230 HRS MST
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8 Cont'd

GEODETIC COORDINATES
32°09'27" LAT DEG
136°40'59" LON DEG

GEOMETRIC ALTITUDE IN FEET	PRESSURE IN MILLIBARS	TEMPERATURE AIR DEGREES		DEWPOINT CENTIGRADE	REL.HUM. PERCENT	SOUND METER	WIND DATA		INDEX OF REFRACTION
		DEGREES	CENTIGRADE				GM/CURIC KNOTS	DIRECTION DEGREES (TN)	
19900.0	469.4	-21.5	-35.1	27.9	649.6	618.1	265.4	31.2	1.000147
20000.0	467.5	-21.7	-35.4	27.4	647.5	617.9	265.4	31.6	1.000146
20100.0	465.6	-21.9	-35.8	26.9	645.3	617.6	265.5	31.9	1.000145
20200.0	463.7	-22.1	-36.1	26.7	643.3	617.3	265.5	32.2	1.000145
20300.0	461.7	-22.4	-36.3	26.5	641.2	617.0	265.6	32.5	1.000144
20400.0	459.8	-22.6	-36.6	26.3	639.1	616.7	265.6	32.8	1.000144
20500.0	457.9	-22.8	-36.9	26.1	637.1	616.4	265.6	33.1	1.000143
20600.0	456.0	-23.0	-37.2	25.9	635.1	616.1	266.0	33.4	1.000143
20700.0	454.1	-23.3	-37.5	25.7	633.0	615.9	266.1	33.7	1.000142
20800.0	452.2	-23.5	-37.8	25.5	631.0	615.6	266.3	34.0	1.000142
20900.0	450.3	-23.8	-38.1	25.3	629.0	615.3	266.4	34.3	1.000141
21000.0	448.5	-24.0	-38.3	25.1	627.0	615.0	266.7	34.3	1.000141
21100.0	446.6	-24.3	-38.6	24.9	624.9	614.7	267.0	34.3	1.000141
21200.0	444.7	-24.5	-38.9	24.7	622.9	614.4	267.3	34.3	1.000140
21300.0	442.9	-24.7	-39.2	24.5	621.0	614.1	267.6	34.3	1.000140
21400.0	441.0	-25.0	-39.5	24.2	619.0	613.8	267.9	34.3	1.000139
21500.0	439.2	-25.2	-39.8	24.0	617.0	613.5	268.0	34.4	1.000139
21600.0	437.4	-25.4	-40.1	23.8	615.0	613.2	269.3	34.5	1.000138
21700.0	435.6	-25.7	-40.4	23.6	613.0	612.9	270.1	34.7	1.000138
21800.0	433.7	-25.9	-40.6	23.4	611.1	612.6	270.9	34.8	1.000137
21900.0	431.9	-26.2	-40.9	23.2	609.1	612.3	271.6	35.0	1.000137
22000.0	430.1	-26.4	-41.2	23.0	607.2	612.0	272.0	35.2	1.000136
22100.0	428.3	-26.6	-41.3	23.1	605.1	611.8	272.0	35.6	1.000136
22200.0	426.5	-26.8	-41.4	23.3	603.1	611.5	272.0	36.0	1.000135
22300.0	424.7	-27.0	-41.6	23.5	601.0	611.3	272.0	36.4	1.000135
22400.0	423.0	-27.2	-41.7	23.6	599.0	611.0	272.1	36.7	1.000134
22500.0	421.2	-27.4	-41.8	23.8	596.9	610.8	271.9	37.0	1.000134
22600.0	419.4	-27.6	-41.9	23.9	594.9	610.5	271.4	37.2	1.000133
22700.0	417.6	-27.8	-42.0	24.2	592.9	610.2	271.0	37.4	1.000133
22800.0	415.9	-28.1	-42.1	24.7	591.1	609.9	270.6	37.6	1.000133
22900.0	414.1	-28.4	-42.1	25.1	589.3	609.5	270.1	37.8	1.000132
23000.0	412.3	-28.7	-42.2	25.6	587.5	609.1	269.9	38.0	1.000132
23100.0	410.6	-29.0	-42.3	26.1	585.7	608.8	269.8	38.1	1.000131
23200.0	408.8	-29.3	-42.4	26.6	584.0	608.4	269.8	38.2	1.000131
23300.0	407.1	-29.6	-42.5	27.0	582.2	608.0	269.8	38.3	1.000131
23400.0	405.4	-29.9	-42.6	27.5	580.4	607.7	269.6	38.4	1.000130
23500.0	403.7	-30.2	-42.7	28.0	578.7	607.3	269.6	38.6	1.000130
23600.0	402.0	-30.5	-42.8	28.5	576.9	606.9	269.8	39.0	1.000129
23700.0	400.2	-30.8	-42.9	28.9	575.1	606.6	269.8	39.3	1.000129
23800.0	398.5	-31.1	-42.9	29.7	573.4	606.2	269.9	39.6	1.000129

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 1962 1230 HRS MST
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8 Cont'd

GEOGRAPHIC COORDINATES
32.9927 LAT UEG
136.40591 LON DEG

GEOGRAPHIC PRESSURE ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES	DEPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF WIND KNOTS	WIND DATA DIRECTION DEGREES (IN) SPEED KNOTS	INDEX OF REFRACTION
23900.0	390.8	-31.3	30.4	571.6	605.8	269.9	40.0
24000.0	395.1	-31.6	-43.0	569.8	605.5	269.7	40.4
24100.0	393.4	-31.9	-43.0	568.0	605.1	269.1	40.9
24200.0	391.7	-32.2	-43.1	566.3	604.7	268.6	41.4
24300.0	390.0	-32.5	-43.1	564.5	604.4	268.0	41.9
24400.0	388.3	-32.8	-43.2	562.8	604.0	267.5	42.4
24500.0	386.6	-33.1	-43.3	561.0	603.6	267.0	42.9
24600.0	384.9	-33.4	-43.3	559.3	603.2	266.9	43.4
24700.0	383.3	-33.7	-43.4	557.5	602.9	266.9	43.9
24800.0	381.6	-34.0	-43.5	555.8	602.5	266.8	44.4
24900.0	380.0	-34.3	-43.6	554.1	602.1	266.7	45.0
25000.0	378.3	-34.6	-43.7	552.4	601.8	266.6	45.5
25100.0	376.7	-34.9	-43.7	550.7	601.4	266.9	45.8
25200.0	375.1	-35.2	-43.8	549.0	601.0	267.4	46.1
25300.0	373.4	-35.5	-43.9	547.3	600.6	267.9	46.4
25400.0	371.8	-35.8	-44.0	545.6	600.3	268.4	46.7
25500.0	370.2	-36.1	-44.2	543.9	599.9	268.9	47.0
25600.0	368.6	-36.4	-44.3	542.2	599.5	269.4	47.2
25700.0	367.0	-36.6	-44.3	540.5	599.2	269.6	47.1
25800.0	365.4	-36.9	-43.8	538.8	598.8	269.8	47.0
25900.0	363.8	-37.2	-43.3	537.0	598.5	270.0	46.9
26000.0	362.2	-37.5	-42.9	535.3	598.1	270.3	46.7
26100.0	360.6	-37.7	-42.8	533.6	597.8	270.5	46.6
26200.0	359.0	-37.9	-42.8	531.5	597.6	270.8	46.3
26300.0	357.4	-38.0	-42.9	529.6	597.4	271.1	46.0
26400.0	355.9	-38.2	-42.9	527.6	597.2	271.4	45.7
26500.0	354.3	-38.4	-43.0	525.7	596.9	271.8	45.4
26600.0	352.7	-38.6	-43.1	523.8	596.7	272.1	45.1
26700.0	351.2	-38.8	-43.1	521.9	596.5	272.5	44.9
26800.0	349.6	-38.9	-43.2	520.0	596.2	272.8	44.9
26900.0	348.1	-39.2	-43.8	518.2	595.9	273.1	44.9
27000.0	346.5	-39.4	-44.8	516.4	595.6	273.4	44.9
27100.0	345.0	-39.7	-45.8	514.7	595.3	273.7	44.8
27200.0	343.5	-39.9	-46.8	512.9	595.0	274.0	45.0
27300.0	341.9	-40.1	-48.0	511.2	594.7	274.3	45.1
27400.0	340.4	-40.4	-49.2	509.4	594.4	274.5	45.3
27500.0	338.9	-40.6	-50.5	507.7	594.1	274.8	45.4
27600.0	337.4	-40.9	-52.0	506.0	593.8	275.1	45.6
27700.0	335.9	-41.1	-53.7	504.3	593.4	275.3	45.8
27800.0	334.4	-41.4	-55.6	502.5	593.1	275.5	46.1

• AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 82 1230 HRS MST
ASCENSION, NC. 1/3

UPPER AIR DATA
5340290173
EAST-28/CHERRY
TABLE 3 Cont'd

GEODETIC COORDINATES
32°89927 LAT DEG
136°40591 LON LEG

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	DEFNSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	INCLINATION DEGREES (ITN)	INDEX OF REFRACTION
≤7900.0	336.0	-61.6	-57.9	14.9**	500.8	275.7	46.3
≤8000.0	331.4	-61.9	-61.0	10.3**	494.1	275.9	46.5
≤8100.0	329.0	-62.1	-65.5	5.7**	497.4	276.0	47.0
≤8200.0	326.5	-62.3	-76.6	1.1**	405.8	276.2	47.5
≤8300.0	327.0	-62.4			403.7	276.3	48.0
≤8400.0	325.5	-62.5			491.6	276.4	48.6
≤8500.0	324.1	-62.5			489.5	276.5	49.1
≤8600.0	322.6	-62.6			407.4	276.6	48.9
≤8700.0	321.2	-62.6			485.3	277.2	48.8
≤8800.0	319.7	-62.7			483.3	277.5	48.7
≤8900.0	318.3	-62.7			481.2	277.9	48.6
≤9000.0	316.9	-62.8			479.1	278.1	48.5
≤9100.0	315.4	-62.9			477.2	278.8	48.0
≤9200.0	314.0	-63.1			475.5	279.5	47.5
≤9300.0	312.6	-63.3			473.8	280.1	47.0
≤9400.0	311.2	-63.5			472.1	280.6	46.5
≤9500.0	309.8	-63.7			470.4	280.1	46.0
≤9600.0	308.4	-63.9			468.7	280.7	45.4
≤9700.0	307.0	-64.1			467.0	282.7	44.7
≤9800.0	305.6	-64.4			465.3	283.3	44.0
≤9900.0	304.2	-64.6			463.6	283.9	43.3
≤10000.0	302.8	-64.8			461.9	284.6	42.7
≤10100.0	301.5	-65.0			460.3	285.0	42.2
≤10200.0	300.1	-65.2			458.6	284.5	42.7
≤10300.0	298.7	-65.3			456.8	284.9	42.3
≤10400.0	297.4	-65.5			455.0	284.2	42.4
≤10500.0	296.0	-65.6			453.2	284.7	42.5
≤10600.0	294.7	-65.8			451.4	285.6	42.6
≤10700.0	293.3	-65.9			449.6	284.5	42.7
≤10800.0	292.0	-66.0			447.9	285.3	42.3
≤10900.0	290.6	-66.2			446.1	285.7	44.8
≤11000.0	289.3	-66.3			444.4	285.5	45.4
≤11100.0	288.0	-66.5			442.6	285.3	46.1
≤11200.0	286.7	-66.6			440.9	285.2	46.4
≤11300.0	285.4	-66.8			439.1	285.3	46.5
≤11400.0	284.1	-66.9			437.4	285.4	46.6
≤11500.0	282.8	-67.0			435.7	285.5	46.6
≤11600.0	281.5	-67.2			434.0	285.5	46.7
≤11700.0	280.2	-67.3			432.2	285.6	46.8
≤11800.0	278.9	-67.5			430.5	285.7	46.8

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 42 1230 hrs MST
ASCENSION NO. 173

UPPER AIR DATA
3340290175
EAST-28/CHERRY
TABLE 8 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT PERCENT	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SOUND SPEED KNOTS	WIND DATA DIRECTION (DEGREES IN) SPEED KNOTS	INFLUX OF REFRACTION
31900.0	277.6	-47.6			428.8	585.1	263.7	46.8 1.000096
32000.0	276.4	-47.8			427.2	584.9	263.8	46.9 1.000095
32100.0	275.1	-47.9			425.5	584.7	263.9	46.9 1.000095
32200.0	273.8	-48.0			423.8	584.5	263.9	46.9 1.000094
32300.0	272.6	-48.0			421.7	584.6	264.1	46.9 1.000094
32400.0	271.3	-47.8			419.4	584.9	264.4	46.7 1.000093
32500.0	270.1	-47.6			417.2	585.0	264.7	46.5 1.000093
32600.0	268.9	-47.8			415.7	584.8	265.0	46.3 1.000093
32700.0	267.6	-48.0			414.1	584.6	265.4	46.2 1.000092
32800.0	266.4	-48.2			412.5	584.3	265.7	46.0 1.000092
32900.0	265.2	-48.4			410.9	584.1	265.6	46.6 1.000092
33000.0	263.9	-48.6			409.4	583.8	265.4	47.3 1.000091
33100.0	262.7	-48.7			407.8	583.6	265.2	48.1 1.000091
33200.0	261.5	-48.9			406.3	583.4	265.1	48.8 1.000090
33300.0	260.3	-49.1			404.7	583.1	264.9	49.5 1.000090
33400.0	259.1	-49.3			403.2	582.9	264.6	50.1 1.000090
33500.0	257.9	-49.5			401.7	582.7	264.4	50.7 1.000089
33600.0	256.7	-49.6			400.1	582.4	264.1	51.3 1.000089
33700.0	255.5	-49.8			398.5	582.2	263.9	51.9 1.000089
33800.0	254.3	-49.9			397.0	582.0	263.8	52.2 1.000088
33900.0	253.2	-50.1			395.4	581.8	263.9	52.2 1.000088
34000.0	252.0	-50.2			393.8	581.6	264.0	52.3 1.000088
34100.0	250.9	-50.4			392.3	581.4	264.1	52.3 1.000087
34200.0	249.7	-50.5			390.7	581.3	264.2	52.3 1.000086
34300.0	248.5	-50.6			388.9	581.2	264.1	52.7 1.000087
34400.0	247.3	-50.6			387.2	581.1	264.1	53.2 1.000086
34500.0	246.2	-50.7			385.6	581.0	264.0	53.6 1.000086
34600.0	245.0	-50.8			383.9	581.0	263.9	54.1 1.000086
34700.0	243.9	-50.8			382.2	580.9	263.7	54.9 1.000085
34800.0	242.8	-50.9			380.5	580.8	263.4	56.1 1.000085
34900.0	241.6	-50.8			378.6	580.9	263.2	57.4 1.000084
35000.0	240.5	-50.6			376.6	581.1	262.9	58.6 1.000084
35100.0	239.4	-50.5			374.6	581.3	262.6	59.9 1.000083
35200.0	238.3	-50.4			372.6	581.5	262.6	60.4 1.000083
35300.0	237.2	-50.2			370.7	581.7	262.6	60.7 1.000083
35400.0	236.1	-50.1			368.7	581.8	262.6	61.0 1.000082
35500.0	235.0	-49.9			366.8	582.0	262.6	61.4 1.000082
35600.0	233.9	-50.0			365.2	581.9	262.6	61.7 1.000081
35700.0	232.8	-50.2			363.8	581.7	262.8	61.1 1.000081
35800.0	231.7	-50.4			362.3	581.5	263.0	60.0 1.000081

51,000 FT. ALTITUDE 3912.75 F.T. SL
16 SEC. E² 123^o HRC. AST
ASDESIGN NO. 173

UPPER AIR DATA
330290173
EAST-28/CHERRY
TABLE 8 Cont'd

GEODETIC COORDINATES
32°09'927 LAT LEG
136°40'591 LONG LEG

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	GM/CUBIC METER	SOUND KNOTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
33000.0	230.0	-50.6	360.9	581.2	285.3	59.0	1.000000	
32900.0	229.5	-50.7	359.5	581.0	285.0	58.0	1.000000	
32800.0	228.5	-50.9	358.2	580.8	283.9	56.9	1.000000	
32700.0	227.4	-51.1	356.8	580.5	284.2	56.0	1.000000	
32600.0	226.3	-51.3	355.4	580.3	284.4	55.2	1.000000	
32400.0	225.3	-51.5	354.0	580.0	284.6	54.4	1.000000	
32300.0	224.2	-51.6	352.7	579.8	284.9	53.7	1.000000	
32600.0	223.2	-51.8	351.3	579.6	285.1	52.9	1.000000	
32700.0	222.1	-52.0	349.9	579.3	285.4	52.1	1.000000	
326800.0	221.1	-52.2	348.6	579.1	285.4	51.6	1.000000	
326400.0	220.1	-52.4	347.2	578.9	285.5	51.0	1.000000	
327000.0	219.0	-52.6	346.9	578.6	285.5	50.5	1.000000	
327100.0	218.0	-52.7	344.6	578.4	285.6	50.0	1.000000	
327200.0	217.0	-52.9	343.2	578.1	285.6	49.5	1.000000	
327300.0	216.0	-53.1	341.9	577.9	285.5	49.0	1.000000	
327400.0	215.0	-53.3	340.6	577.7	285.1	48.6	1.000000	
327500.0	214.0	-53.5	339.3	577.4	284.7	48.2	1.000000	
327600.0	213.0	-53.6	338.0	577.2	284.3	47.8	1.000000	
327700.0	212.0	-53.8	336.7	576.9	283.9	47.4	1.000000	
327800.0	211.0	-54.0	335.4	576.7	283.4	47.0	1.000000	
327900.0	210.0	-54.2	334.1	576.5	282.6	47.1	1.000000	
328000.0	209.0	-54.4	332.8	576.2	281.8	47.3	1.000000	
328100.0	208.0	-54.5	331.4	576.0	280.9	47.4	1.000000	
328200.0	207.0	-54.6	330.0	576.0	280.1	47.4	1.000000	
328300.0	206.0	-54.6	328.5	575.9	279.3	47.9	1.000000	
328400.0	205.1	-54.7	327.0	575.6	278.3	48.7	1.000000	
328500.0	204.1	-54.8	325.6	575.7	277.3	49.6	1.000000	
328600.0	203.1	-54.8	324.1	575.7	276.3	50.5	1.000000	
328700.0	202.2	-54.9	322.7	575.6	275.4	51.5	1.000000	
328800.0	201.2	-54.9	321.2	575.5	274.6	52.5	1.000000	
328900.0	200.3	-55.0	319.8	575.4	273.7	53.9	1.000000	
329000.0	199.3	-54.9	318.2	575.5	272.9	55.4	1.000000	
329100.0	198.4	-54.9	316.6	575.6	272.1	56.8	1.000000	
329200.0	197.4	-54.8	314.9	575.7	271.4	58.3	1.000000	
329300.0	196.5	-54.7	313.3	575.8	270.7	59.7	1.000000	
329400.0	195.6	-54.6	311.7	575.9	270.0	60.9	1.000000	
329500.0	194.7	-54.5	310.1	576.1	269.3	62.1	1.000000	
329600.0	193.7	-54.4	308.6	576.2	268.6	63.4	1.000000	
329700.0	192.8	-54.3	307.0	576.3	268.0	64.6	1.000000	
329800.0	191.9	-54.2	305.4	576.4	267.4	65.0	1.000000	

STATION ALTITUDE 3912.75 FT. T MS₁
 30 40V. 62° 123n 115° WEST
 ASCENSION NO. 173

UPPER AIR DATA
 3340290173
 EAST-28/CHERRY
 TABLE 8 Cont'd

GEODETIC COORDINATES
 32.89927 LAT DEG
 136.40591 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRAD	DEWPOINT DEGREES CENTIGRAD	KEL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
39900.0	101.0	-54.2			303.8	576.5	266.9	64.4	1.000068
40000.0	190.1	-54.1			302.3	576.6	266.3	63.8	1.000067
40100.0	139.2	-54.0			300.7	576.7	265.7	63.3	1.000067
40200.0	188.3	-53.9			299.2	576.8	265.2	62.7	1.000067
40300.0	187.4	-53.8			297.7	577.0	264.9	61.8	1.000066
40400.0	186.5	-53.7			296.1	577.1	265.0	60.8	1.000066
40500.0	185.7	-53.5			294.4	577.4	265.0	59.7	1.000066
40600.0	184.8	-53.1			292.5	577.9	265.0	58.6	1.000065
40700.0	183.9	-52.7			290.7	578.4	265.1	57.6	1.000065
40800.0	183.1	-52.4			288.8	578.9	265.2	56.6	1.000064
40900.0	182.2	-52.0			287.0	579.4	265.3	56.0	1.000064
41000.0	181.4	-51.6			285.2	579.8	265.4	55.4	1.000064
41100.0	180.5	-51.2			283.4	580.2	266.2	54.8	1.000063
41200.0	179.7	-50.9			281.6	580.8	266.6	54.2	1.000063
41300.0	178.8	-50.5			279.8	581.3	267.0	53.6	1.000062
41400.0	178.0	-50.1			278.1	581.8	267.3	53.1	1.000062
41500.0	177.2	-49.8			276.3	582.3	267.7	52.5	1.000062
41600.0	176.4	-49.4			274.6	582.7	268.0	52.0	1.000061
41700.0	175.5	-49.1			273.0	583.1	268.3	51.4	1.000061
41800.0	174.7	-49.3			271.9	582.9	268.7	50.9	1.000061
41900.0	173.9	-49.5			270.9	582.6	269.0	50.4	1.000060
42000.0	173.1	-49.7			269.8	582.4	269.3	50.0	1.000060
42100.0	172.3	-49.8			268.8	582.2	269.6	49.6	1.000060
42200.0	171.5	-50.0			267.7	582.0	269.8	49.3	1.000060
42300.0	170.7	-50.2			266.7	581.7	270.1	48.9	1.000059
42400.0	169.9	-50.3			265.7	581.5	270.4	48.6	1.000059
42500.0	169.1	-50.5			264.6	581.3	270.5	48.3	1.000059
42600.0	168.3	-50.7			263.6	581.1	270.5	48.0	1.000059
42700.0	167.6	-50.9			262.6	580.8	270.4	47.8	1.000058
42800.0	166.8	-51.0			261.6	580.6	270.3	47.6	1.000058
42900.0	166.0	-51.2			260.6	580.4	270.2	47.3	1.000058
43000.0	165.2	-51.4			259.6	580.2	270.1	47.1	1.000058
43100.0	164.5	-51.6			258.6	579.9	269.7	47.0	1.000058
43200.0	163.7	-51.7			257.6	579.7	269.3	47.0	1.000057
43300.0	162.9	-52.0			256.6	579.4	268.9	47.0	1.000057
43400.0	162.2	-52.2			255.7	579.0	268.5	47.0	1.000057
43500.0	161.4	-52.5			254.9	578.7	268.1	46.9	1.000057
43600.0	160.7	-52.8			254.0	578.3	267.7	46.9	1.000057
43700.0	159.9	-53.1			253.1	577.9	267.3	47.0	1.000056
43800.0	159.1	-53.4			252.3	577.6	266.8	47.1	1.000056

STATION ALTITUDE 3912.75 FEET
70° 45' N. LAT 123° 10' E. LONG
ASSIGNMENT NO. 173

REPORT AIR DATA
3360290173
EAST-28/CHERRY
TABLE 3 Cont'd

GEODETIC COORDINATES
32° 59' 27" LAT.
136° 49' 51" LONG.

REF. ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CELSIUS	REL. HUM. PERCENT	GRV/CURRIC METER	SPEED OF SOUND KNOTS	DIRECTION WIND DEGREES (TN)	WIND DATA KNOTS (TN)	INDEX OF REFRACTION
1500.0	1013.4	-52.5	251.4	577.2	250.4	250.4	47.2	1.000056
1500.0	1013.0	-52.0	250.5	576.8	250.0	47.3	1.000056	
14200.0	1013.1	-54.2	249.7	576.5	250.6	47.1	1.000056	
14200.0	1013.0	-54.4	248.7	576.2	250.2	47.4	1.000055	
13700.0	1013.0	-54.4	247.5	576.3	249.9	47.5	1.000055	
13700.0	1013.0	-54.5	246.3	576.3	249.6	47.5	1.000055	
13200.0	1013.0	-54.3	245.1	576.3	249.4	47.2	1.000055	
13200.0	1013.0	-54.3	245.9	576.4	249.1	47.2	1.000054	
12700.0	1012.5	-54.2	242.7	576.4	253.8	47.2	1.000054	
12700.0	1012.0	-54.1	241.5	576.6	253.6	47.1	1.000054	
12200.0	1012.0	-54.2	240.3	576.5	253.3	47.1	1.000054	
12200.0	1012.0	-54.1	239.1	576.5	253.1	47.0	1.000053	
11700.0	1012.0	-54.1	238.9	576.5	252.8	47.0	1.000053	
11700.0	1012.0	-54.1	236.0	576.6	252.6	47.0	1.000053	
11200.0	1012.0	-54.0	235.8	576.6	252.3	47.0	1.000053	
10700.0	1012.0	-54.0	234.7	576.6	252.0	46.9	1.000053	
10700.0	1012.0	-54.1	233.6	576.6	251.7	46.9	1.000052	
10200.0	1012.0	-54.1	232.5	576.5	251.3	46.9	1.000052	
9700.0	1012.0	-54.1	231.4	576.6	250.9	46.8	1.000052	
9200.0	1012.0	-54.1	230.3	576.6	250.6	46.8	1.000051	
8700.0	1012.0	-54.1	229.3	576.4	250.2	46.8	1.000051	
8200.0	1012.0	-54.0	228.4	576.2	259.9	46.7	1.000051	
7700.0	1012.0	-54.0	227.5	575.9	259.5	46.6	1.000051	
7200.0	1012.0	-54.0	226.6	575.7	259.2	46.6	1.000050	
6700.0	1012.0	-54.0	225.7	575.5	258.8	46.5	1.000050	
6200.0	1012.0	-54.0	224.9	575.2	258.5	46.4	1.000050	
5700.0	1012.0	-54.0	224.0	575.0	258.1	46.3	1.000050	
5200.0	1012.0	-54.0	223.1	574.8	257.7	46.2	1.000050	
4700.0	1012.0	-54.0	222.2	574.5	257.4	46.1	1.000049	
4200.0	1012.0	-54.0	221.3	574.3	257.0	46.1	1.000049	
3700.0	1012.0	-54.0	220.5	574.1	256.6	46.0	1.000049	
3200.0	1012.0	-54.0	219.7	573.8	256.2	45.9	1.000049	
2700.0	1012.0	-54.0	218.9	573.6	255.9	45.9	1.000049	
2200.0	1012.0	-54.0	217.9	573.4	255.6	45.9	1.000049	
1700.0	1012.0	-54.0	217.0	573.1	255.2	45.9	1.000048	
1200.0	1012.0	-54.0	216.2	572.9	254.9	46.0	1.000048	
700.0	1012.0	-54.0	215.2	572.8	254.6	46.0	1.000048	
200.0	1012.0	-54.0	214.3	572.6	254.2	46.1	1.000048	
150.0	1012.0	-54.0	213.4	572.5	253.8	46.2	1.000048	
100.0	1012.0	-54.0	212.5	572.3	253.5	46.3	1.000047	

STATION ALTITUDE 3912.75 FT. 1ST SL
30 NOV. 82 1236 HRS. MST
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT PERCENT	REL.HUM. GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION IN DEGREES (TN)	INDEX OF REFRACTION
47900.0	131.0	-57.4		211.5	572.2	253.2	1.000047
48000.0	130.4	-57.5		210.6	572.1	252.8	1.000047
48100.0	129.7	-57.6		209.7	571.9	252.5	1.000047
48200.0	129.1	-57.7		208.8	571.8	252.2	1.000047
48300.0	128.5	-57.9		207.9	571.6	251.9	1.000046
48400.0	127.9	-58.0		207.0	571.5	251.8	1.000046
48500.0	127.3	-58.1		206.1	571.4	251.6	1.000046
48600.0	126.6	-58.2		205.2	571.2	251.5	1.000046
48700.0	126.0	-58.3		204.3	571.1	251.3	1.000046
48800.0	125.4	-58.4		203.5	570.9	251.2	1.000045
48900.0	124.8	-58.5		202.6	570.8	251.2	1.000045
49000.0	124.2	-58.6		201.7	570.7	251.5	1.000045
49100.0	123.6	-58.7		200.8	570.5	251.7	1.000045
49200.0	123.0	-58.8		200.0	570.4	251.9	1.000045
49300.0	122.4	-58.9		199.1	570.2	252.1	1.000044
49400.0	121.9	-59.0		198.2	570.1	252.3	1.000044
49500.0	121.3	-59.1		197.4	570.0	253.0	1.000044
49600.0	120.7	-59.2		196.5	569.8	253.7	1.000044
49700.0	120.1	-59.3		195.7	569.7	254.4	1.000044
49800.0	119.5	-59.4		194.8	569.5	255.1	1.000043
49900.0	119.0	-59.5		194.0	569.4	255.8	1.000043
50000.0	118.4	-59.5		193.0	569.4	256.7	1.000043
50100.0	117.8	-59.2		191.9	569.8	257.5	1.000043
50200.0	117.3	-59.0		190.7	570.2	258.4	1.000042
50300.0	116.7	-58.7		189.6	570.5	259.2	1.000042
50400.0	116.1	-58.4		188.4	570.9	259.8	1.000042
50500.0	115.6	-58.1		187.3	571.2	260.1	1.000042
50600.0	115.0	-57.9		186.1	571.6	260.5	1.000041
50700.0	114.5	-57.6		185.0	572.0	260.8	1.000041
50800.0	113.9	-57.3		183.9	572.3	261.1	1.000041
50900.0	113.4	-57.1		182.8	572.7	261.4	1.000041
51000.0	112.8	-56.8		181.7	573.0	260.8	1.000040
51100.0	112.5	-56.5		180.6	573.4	260.6	1.000040
51200.0	111.8	-56.2		179.5	573.8	260.3	1.000040
51300.0	111.2	-56.0		178.4	574.1	260.0	1.000040
51400.0	110.7	-55.7		177.3	574.5	259.3	1.000039
51500.0	110.2	-55.5		176.4	574.7	258.6	1.000039
51600.0	109.6	-55.7		175.6	574.5	257.8	1.000039
51700.0	109.1	-55.9		174.9	574.3	256.9	1.000039
51800.0	108.6	-56.0		174.2	574.0	256.1	1.000039

STATION ALTITUDE 3912.75 FEET MSL
30°40'N. 82°123°WIRS MSL
ASCENSION NO. 173

UPPER AIR DATA
3340240175
EAST-20/CHERRY
TABLE 8 Cont'd

GEODETIC COORDINATES
32°8927 LAT LEG
136°40591 LON DEG

GEODETIC PRESSURE ALITUDE MSL FEET	TEMPERATURE MILLIBARS	AIR DEPOINT DEGREES	REL.HUM. CENTIGRADE	DENSITY GM/CUBIC METER	SPD OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
519000.0	100.1	-56.2	173.5	573.8	255.1	43.9	1.000039	
520000.0	107.6	-56.3	172.8	573.6	254.1	43.4	1.000038	
521000.0	107.0	-56.5	172.1	573.4	253.1	42.9	1.000038	
522000.0	108.5	-56.7	171.4	573.2	252.1	42.4	1.000038	
523000.0	109.0	-56.8	170.7	573.0	251.0	42.0	1.000038	
524000.0	109.5	-57.0	170.0	572.8	250.2	42.3	1.000038	
525000.0	105.0	-57.2	169.4	572.6	249.4	42.6	1.000038	
526000.0	104.5	-57.3	168.7	572.3	248.5	42.9	1.000038	
527000.0	104.0	-57.5	168.0	572.1	247.7	43.2	1.000037	
528000.0	103.5	-57.6	167.3	571.9	246.9	43.6	1.000037	
529000.0	103.0	-57.8	166.6	571.7	246.2	43.9	1.000037	
530000.0	102.5	-58.0	166.0	571.5	245.6	44.2	1.000037	
531000.0	102.0	-58.1	165.3	571.3	244.9	44.4	1.000037	
532000.0	101.5	-58.3	164.6	571.1	244.3	44.7	1.000037	
533000.0	101.1	-58.4	164.0	570.9	243.7	45.0	1.000037	
534000.0	100.6	-58.6	163.3	570.6	243.1	45.3	1.000036	
535000.0	100.1	-58.8	162.7	570.4	242.5	45.6	1.000036	
536000.0	99.6	-58.9	161.9	570.3	242.1	45.7	1.000036	
537000.0	99.1	-59.0	161.2	570.1	241.9	45.5	1.000036	
538000.0	98.6	-59.1	160.5	570.0	241.6	45.2	1.000036	
539000.0	98.2	-59.2	159.8	569.9	241.4	45.0	1.000036	
540000.0	97.7	-59.3	159.1	569.7	241.1	44.8	1.000035	
541000.0	97.2	-59.4	158.4	569.6	240.9	44.5	1.000035	
542000.0	96.7	-59.5	157.7	569.5	240.6	44.3	1.000035	
543000.0	96.3	-59.6	157.0	569.3	240.5	43.9	1.000035	
544000.0	95.8	-59.7	156.3	569.2	240.4	43.4	1.000035	
545000.0	95.5	-59.8	155.6	569.1	240.3	42.9	1.000035	
546000.0	94.9	-59.9	155.0	568.9	240.2	42.5	1.000035	
547000.0	94.4	-60.0	154.3	568.8	240.1	42.0	1.000034	
548000.0	93.9	-60.1	153.6	568.6	240.0	41.5	1.000034	
549000.0	93.5	-60.2	152.9	568.5	239.9	41.0	1.000034	
550000.0	93.0	-60.3	152.2	568.4	239.4	40.2	1.000034	
551000.0	92.6	-60.4	151.6	568.2	238.9	39.3	1.000034	
552000.0	92.1	-60.5	150.9	568.1	238.3	38.4	1.000034	
553000.0	91.7	-60.6	150.2	568.0	237.7	37.5	1.000033	
554000.0	91.2	-60.7	149.0	567.8	237.1	36.6	1.000033	
555000.0	90.8	-60.8	148.9	567.7	236.4	35.7	1.000033	
556000.0	90.3	-60.9	148.3	567.6	235.7	34.8	1.000033	
557000.0	89.9	-61.0	147.6	567.4	234.3	33.2	1.000033	
558000.0	89.5	-61.1	147.0	567.3	232.7	31.6	1.000033	

STATION ALTITUDE 3912.75 FEET MSL
 30.00V. H2 123.01 HRS HLT
 ASCENSION NO. 173

UPPER AIR DATA
 3340290173
 EAST-28/CHEERY
 TABLE 8 Cont'd

GEODETIC COORDINATES
 32.89927 LAT DEG
 136.40591 LON DEG

GEOMETRIC ALTITUDE NSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPONT CENTIGRADE	REL. HUM. PERCENT	SPEED OF WIND DATA KNOTS	WIND DATA DIRECTION DEGREES(TN)	INDEX OF REFRACTION
53900.0	89.0	-61.2		146.3	567.2	231.0	30.1
58000.0	88.6	-61.3		145.7	567.0	229.1	28.5
58100.0	88.2	-61.4		145.0	566.9	227.0	27.1
58200.0	87.7	-61.5		144.4	566.8	224.6	25.6
58300.0	87.3	-61.6		143.8	566.6	222.5	24.5
58400.0	86.9	-61.7		143.1	566.5	221.8	24.0
58500.0	86.4	-61.8		142.5	566.3	221.0	23.5
58600.0	86.0	-61.9		141.9	566.2	220.3	23.0
58700.0	85.6	-62.0		141.2	566.1	219.5	22.5
58800.0	85.2	-62.1		140.6	565.9	218.6	22.0
58900.0	84.8	-62.2		140.0	565.8	210.9	22.7
57000.0	84.4	-62.3		139.4	565.7	224.1	23.8
57100.0	83.9	-62.4		138.8	565.5	226.9	25.1
57200.0	83.5	-62.5		138.2	565.4	229.5	26.4
57300.0	83.1	-62.6		137.6	565.3	231.9	27.8
57400.0	82.7	-62.7		137.0	565.1	233.9	29.1
57500.0	82.3	-62.8		136.4	565.0	235.4	30.0
57600.0	81.9	-62.9		135.8	564.9	236.8	30.9
57700.0	81.5	-63.0		135.2	564.7	238.1	31.8
57800.0	81.1	-63.1		134.6	564.6	239.4	32.6
57900.0	80.7	-63.2		134.0	564.4	240.5	33.8
58000.0	80.3	-63.3		133.4	564.3	241.2	34.0
58100.0	79.9	-63.4		132.8	564.2	241.6	33.9
58200.0	79.6	-63.5		132.2	564.0	242.0	33.8
58300.0	79.2	-63.6		131.6	563.9	242.4	33.7
58400.0	78.8	-63.7		131.1	563.8	242.8	33.6
58500.0	78.4	-63.8		130.5	563.6	243.2	33.5
58600.0	78.0	-63.9		129.9	563.5	243.4	33.1
58700.0	77.6	-64.0		129.3	563.4	243.6	32.7
58800.0	77.2	-64.1		128.7	563.3	243.8	32.3
58900.0	76.8	-64.2		128.0	563.4	244.0	31.9
59000.0	76.4	-64.3		127.4	563.5	244.2	31.5
59100.0	76.0	-64.4		126.7	563.6	244.5	31.2
59200.0	75.7	-64.5		126.0	563.7	244.8	30.9
59300.0	75.3	-64.6		125.4	563.8	245.0	30.6
59400.0	75.0	-64.7		124.7	563.9	245.3	30.4
59500.0	74.6	-64.8		124.1	564.0	245.6	30.1
59600.0	74.3	-64.9		123.4	564.1	245.9	29.8
59700.0	73.9	-64.5		122.8	564.1	246.3	29.6
59800.0	73.5	-63.4		122.1	564.2	246.6	29.5

STATION ALTITUDE 3912.75 FT. 1451
30 NOV. 82 1230 HRS MST
ASCENSION NO. 1/3

UPPER AIR DATA
1340260175
EAST-20/CHEKRY
TABLE 80 cont'd

GEODDITIC COORDINATES
32.69927 LAT DEG
136.40591 LON DEG

GEODEMETRIC ALITUDE	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	INTENSITY GM/CURIC METER	SPD/EU SOUND NOISE
10,000 FEET	1000	20	15	80	100	100

STATION ALTITUDE 3912.75 FT, 1 MSL
 30 NOV. 1962 1230 HRS MST
 ASCENSION NO. 173

UPP3340290147A
 EAST-20/CHENRI
 TABLE 8 Cont'd

GEODETIC COORDINATES
 32° 6' 927 LAT LEG
 136° 40' 591 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	AIR DEWPOINT PERCENT	REL.HUM. METER	SPEED OF WIND DATA KNOTS (DEGREES TN)	WIND DIRECTION KNOTS	INDEX OF REFRACTION
63900.0	60.2	-61.0		96.8	567.4	249.6	1.000022
64000.0	59.9	-61.0		96.3	567.4	247.9	1.000022
64100.0	59.6	-60.9		97.8	567.5	246.1	1.000022
64200.0	59.3	-60.9		97.5	567.6	244.9	1.000022
64300.0	59.0	-60.8		96.8	567.7	244.3	1.000022
64400.0	58.7	-60.6		96.3	567.7	243.7	1.000021
64500.0	58.4	-60.7		95.8	567.8	243.4	1.000021
64600.0	58.1	-60.7		95.3	567.9	242.6	1.000021
64700.0	57.9	-60.6		94.8	567.9	242.1	1.000021
64800.0	57.6	-60.6		94.4	568.0	240.4	1.000021
64900.0	57.3	-60.5		93.9	568.1	239.3	1.000021
65000.0	57.0	-60.5		93.4	568.2	235.9	1.000021
65100.0	56.7	-60.4		92.9	568.2	235.2	1.000021
65200.0	56.5	-60.4		92.4	568.3	230.2	1.000021
65300.0	56.2	-60.3		92.0	568.4	226.6	1.000020
65400.0	56.9	-60.1		91.4	568.6	218.2	1.000020
65500.0	56.7	-60.0		90.9	568.8	207.3	1.000020
65600.0	56.4	-59.8		90.4	569.0	193.9	1.000020
65700.0	56.1	-59.7		89.9	569.2	189.6	1.000020
65800.0	54.9	-59.5		89.4	569.5	194.1	1.000020
65900.0	54.6	-59.3		89.9	569.7	198.3	1.000020
66000.0	54.3	-59.2		88.4	569.9	202.0	1.000020
66100.0	54.1	-59.0		88.0	570.1	200.8	1.000020
66200.0	53.8	-58.8		87.5	570.3	199.5	1.000019
66300.0	53.5	-58.7		87.0	570.5	198.1	1.000019
66400.0	53.3	-58.5		86.5	570.7	197.1	1.000019
66500.0	53.0	-58.4		86.0	570.9	196.4	1.000019
66600.0	52.8	-58.2		85.5	571.2	195.6	1.000019
66700.0	52.5	-58.0		85.1	571.4	194.9	1.000019
66800.0	52.3	-57.9		84.6	571.6	184.3	1.000019
66900.0	52.0	-57.7		84.1	571.8	172.9	1.000019
67000.0	51.8	-57.6		83.7	572.0	161.5	1.000019
67100.0	51.5	-57.4		83.2	572.2	150.8	1.000019
67200.0	51.3	-57.2		82.7	572.4	141.0	1.000018
67300.0	51.0	-57.1		82.3	572.7	135.6	1.000018
67400.0	50.8	-56.9		81.8	572.9	127.4	1.000018
67500.0	50.5	-56.8		81.4	573.1	128.6	1.000018
67600.0	50.3	-56.6		80.9	573.3	129.9	1.000018
67700.0	50.1	-56.4		80.5	573.5	131.3	1.000018
67800.0	49.8	-56.3		80.1	573.5	131.3	1.000018

STATION ALTITUDE 3912.75 FT. 1.15L
30 NOV. 62 1230 HRS. ST
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/UNARY
TABLE 3 (cont'd)

GEOMETRIC ALTITUDE IN FEET	PRESSURE IN MILLIBARS	TEMPERATURE IN DEGREES CENTIGRADE	DEWPOINT PERCENT	REL. HUM. SM/CUBIC METER	SPEED OF WIND (NOTS)	INCLINATION EXPRESSION	WIND DATA IN FEET KNOTS	INDEX OF REFRACTION
38000.0	19.6	-6.6			573.3	129.0	12.6	1.00018
36100.0	49.1	-56.7			573.4	129.1	12.6	1.00018
34200.0	42.1	-56.7			573.4	129.1	12.6	1.00018
32300.0	45.9	-56.8			573.5	129.2	12.6	1.00018
30400.0	46.6	-56.9			572.6	129.3	12.6	1.00017
28500.0	43.4	-57.0			572.6	129.3	12.6	1.00017
26600.0	46.2	-57.1			572.7	129.4	12.6	1.00017
24700.0	47.0	-57.2			572.7	129.4	12.6	1.00017
22800.0	47.7	-57.3			572.8	129.5	12.7	1.00017
20900.0	47.5	-57.4			572.8	129.5	12.7	1.00017
19000.0	47.3	-57.5			572.9	129.6	12.7	1.00017
17100.0	47.0	-57.6			572.9	129.6	12.7	1.00017
15200.0	46.8	-57.7			572.9	129.6	12.7	1.00017
13300.0	46.6	-57.8			572.9	129.7	12.7	1.00017
11400.0	46.4	-57.9			572.9	129.7	12.7	1.00017
9500.0	46.1	-58.0			572.9	129.7	12.7	1.00017
7600.0	45.9	-58.1			572.9	129.7	12.7	1.00017
5700.0	45.5	-58.2			571.0	129.8	12.8	1.00017
3800.0	45.3	-58.3			571.0	129.8	12.8	1.00017
1900.0	45.1	-58.4			571.0	129.8	12.8	1.00017
69500.0	45.0	-58.4			571.5	129.8	12.8	1.00017
50600.0	45.0	-58.4			571.5	129.8	12.8	1.00017
31700.0	44.6	-58.6			571.7	129.9	12.9	1.00017
22800.0	45.5	-58.6			571.7	129.9	12.9	1.00017
14000.0	45.3	-58.7			571.7	129.9	12.9	1.00017
70200.0	44.4	-58.7			571.7	129.9	12.9	1.00017
51300.0	44.2	-58.8			571.7	129.9	12.9	1.00017
32400.0	44.0	-58.8			571.7	129.9	12.9	1.00017
13500.0	42.9	-58.8			570.4	129.9	12.9	1.00016
70600.0	45.6	-58.8			570.4	129.9	12.9	1.00016
51700.0	45.4	-58.8			570.4	129.9	12.9	1.00016
32800.0	45.2	-58.8			570.4	129.9	12.9	1.00016
13900.0	45.0	-58.8			570.4	129.9	12.9	1.00016
71000.0	42.7	-58.8			570.4	129.9	12.9	1.00016
52100.0	42.5	-58.8			570.4	129.9	12.9	1.00016
32200.0	42.3	-58.8			570.4	129.9	12.9	1.00016
14100.0	42.1	-58.8			570.4	129.9	12.9	1.00016
71100.0	42.0	-58.8			570.4	129.9	12.9	1.00016
52300.0	41.8	-58.8			570.4	129.9	12.9	1.00016
32400.0	41.6	-58.8			570.4	129.9	12.9	1.00016
14200.0	41.5	-58.8			570.4	129.9	12.9	1.00016
71500.0	41.7	-58.7			570.5	129.9	12.9	1.00015
52500.0	41.5	-58.7			570.5	129.9	12.9	1.00015
32600.0	41.5	-58.7			570.5	129.9	12.9	1.00015
14300.0	41.3	-58.7			570.5	129.9	12.9	1.00015
71700.0	41.1	-58.7			570.5	129.9	12.9	1.00015
52800.0	41.1	-58.7			570.5	129.9	12.9	1.00015

STATION ALTITUDE 3912.75 FFT MSL
30 NOV. 82 123n HRS MST
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-26/CHERRY
TABLE 8 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL.HUM. PERCENT	WIND SPEED OF SOUND METER	WIND DIRECTION DEGREES TN	WIND SPEED KNOTS	INDEX OF REFRACTION
71900.0	40.9	-58.7	66.5	570.5	201.8	45.2	1.000015
72000.0	40.7	-58.7	66.1	570.5	201.8	46.2	1.000015
72100.0	40.5	-58.7	65.8	570.5	201.8	47.2	1.000015
72200.0	40.3	-58.7	65.5	570.6	201.8	48.2	1.000015
72300.0	40.1	-58.7	65.2	570.6	201.8	49.1	1.000015
72400.0	39.9	-58.7	64.9	570.6	201.8	50.1	1.000014
72500.0	39.8	-58.6	64.6	570.6	201.8	51.1	1.000014
72600.0	39.6	-58.6	64.2	570.6	201.8	52.1	1.000014
72700.0	39.4	-58.6	63.9	570.6	201.8	53.1	1.000014
72800.0	39.2	-58.6	63.6	570.6	201.8	53.9	1.000014
72900.0	39.0	-58.6	63.3	570.6	201.8	54.0	1.000014
73000.0	38.8	-58.6	63.0	570.6	201.8	54.2	1.000014
73100.0	38.6	-58.6	62.7	570.6	201.8	54.3	1.000014
73200.0	38.4	-58.5	62.4	570.6	201.8	54.5	1.000014
73300.0	38.2	-58.3	62.0	571.0	201.8	54.6	1.000014
73400.0	38.1	-58.2	61.7	571.2	201.8	54.8	1.000014
73500.0	37.9	-58.0	61.3	571.4	201.8	54.9	1.000014
73600.0	37.7	-57.9	61.0	571.6	201.8	55.1	1.000014
73700.0	37.5	-57.7	60.7	571.8	201.8	55.2	1.000014
73800.0	37.3	-57.6	60.3	572.0	201.8	55.4	1.000014
73900.0	37.2	-57.4	60.0	572.2	201.8	55.5	1.000013
74000.0	37.0	-57.3	59.7	572.4	201.2	55.7	1.000013
74100.0	36.8	-57.1	59.4	572.6	200.6	55.8	1.000013
74200.0	36.6	-57.0	59.0	572.8	200.4	56.0	1.000013
74300.0	36.5	-56.8	58.7	573.0	200.0	56.1	1.000013
74400.0	36.3	-56.7	58.4	573.2	200.0	56.2	1.000013
74500.0	36.1	-56.5	58.1	573.4	200.0	56.4	1.000013
74600.0	35.9	-56.5	57.8	573.4	200.0	56.6	1.000013
74700.0	35.8	-56.5	57.5	573.4	200.0	56.7	1.000013
74800.0	35.6	-56.6	57.3	573.3	200.0	56.9	1.000013
74900.0	35.4	-56.6	57.0	573.3	200.0	57.0	1.000012
75000.0	35.3	-56.6	56.7	573.3	200.0	57.0	1.000012
75100.0	35.1	-56.6	56.5	573.2	200.0	57.0	1.000012
75200.0	34.9	-56.7	56.2	573.2	200.0	57.0	1.000012
75300.0	34.8	-56.7	55.9	573.2	200.0	57.0	1.000012
75400.0	34.6	-56.7	55.7	573.1	200.0	57.0	1.000012
75500.0	34.4	-56.7	55.4	573.1	200.0	57.0	1.000012
75600.0	34.3	-56.8	55.2	573.1	200.0	57.0	1.000012
75700.0	34.1	-56.8	54.9	573.1	200.0	57.0	1.000012
75800.0	33.9	-56.8	54.6	573.0	200.0	57.0	1.000012

STATION ALTITUDE 3912.75 FEET MSL
30 REV. 62 1230 hrs. NST
ASCESSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHLRY
TABLE 3 Cont'd

GEOMETRIC COORDINATES
52°44'42" LAT CEE
136°40'59" LON DEC

GEOMETRIC ALTITUDE MILLIBARS	PRESSURE MILLIBARS	TEMPERATURE DEGREES	AIR DEWPOINT DEGREES	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
							DIRECTION DEGREES (IN)	SPEED KNOTS	
15900.0	33.0	-56.0	-56.0	100	1.2730.0	51.0	253.0	252.4	1.000012
16000.0	32.9	-56.0	-56.0	101	1.2730.0	50.7	252.4	252.4	1.000012
16100.0	32.8	-56.0	-56.0	102	1.2729.9	50.6	252.4	252.4	1.000012
16200.0	32.7	-56.0	-56.0	103	1.2729.9	50.6	252.4	252.4	1.000012
16300.0	32.6	-56.0	-56.0	104	1.2729.9	50.5	252.4	252.4	1.000012
16400.0	32.5	-56.0	-56.0	105	1.2729.9	50.5	252.4	252.4	1.000012
16500.0	32.4	-57.0	-57.0	106	1.2729.8	50.5	252.4	252.4	1.000012
16600.0	32.3	-57.0	-57.0	107	1.2729.8	50.5	252.4	252.4	1.000012
16700.0	32.2	-57.0	-57.0	108	1.2729.8	50.5	252.4	252.4	1.000012
16800.0	32.1	-57.0	-57.0	109	1.2729.8	50.4	252.4	252.4	1.000012
16900.0	32.0	-57.1	-57.1	110	1.2729.7	50.4	252.4	252.4	1.000012
17000.0	31.9	-57.1	-57.1	111	1.2729.7	50.3	252.4	252.4	1.000012
17100.0	31.8	-57.1	-57.1	112	1.2729.7	50.3	252.4	252.4	1.000012
17200.0	31.7	-57.1	-57.1	113	1.2729.7	50.3	252.4	252.4	1.000012
17300.0	31.6	-57.1	-57.1	114	1.2729.7	50.3	252.4	252.4	1.000012
17400.0	31.5	-57.2	-57.2	115	1.2729.7	50.3	252.4	252.4	1.000012
17500.0	31.4	-57.2	-57.2	116	1.2729.6	50.2	252.4	252.4	1.000012
17600.0	31.3	-57.2	-57.2	117	1.2729.6	50.2	252.4	252.4	1.000012
17700.0	31.2	-57.2	-57.2	118	1.2729.6	50.1	252.4	252.4	1.000012
17800.0	31.1	-57.3	-57.3	119	1.2729.5	49.8	252.4	252.4	1.000012
17900.0	30.9	-57.3	-57.3	120	1.2729.5	49.5	252.4	252.4	1.000012
18000.0	30.6	-57.3	-57.3	121	1.2729.3	49.3	252.3	252.3	1.000012
18100.0	30.4	-57.3	-57.3	122	1.2729.1	49.1	252.3	252.3	1.000012
18200.0	30.3	-57.4	-57.4	123	1.2728.9	48.9	252.3	252.3	1.000012
18300.0	30.1	-57.4	-57.4	124	1.2728.6	48.6	252.3	252.3	1.000012

STATION ALTITUDE 3912.75 FT EL MSL
30 NOV. 02 1230 hrs MST
ASCENSION NO. 173

MANDATORY LEVELS
3340290173
EAST-28/CHERRY
TABLE 9

GEODETIC COORDINATES
32.64927 LAT deg
136.40591 LON deg

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE DEGREES	AIR DEWPOINT CENTIGRADE	REL. HUM. PERCENT	WIND DATA DIRECTION DEGREES (TN)	WIND SPEED KNOTS
150.0	4631.	11.0	.1	47.	210.0	14.6
200.0	6277.	6.1	-1.1	60.	216.2	14.4
250.0	7997.	1.1	-2.3	78.	222.0	17.0
300.0	9808.	-2.2	-8.7	61.	239.8	26.5
350.0	11732.	-4.8	-14.5	46.	250.3	36.7
400.0	13782.	-8.2	-17.6	46.	255.1	39.0
450.0	15980.	-13.2	-24.2	39.	262.2	31.8
500.0	18338.	-18.4	-29.7	36.	261.9	30.7
550.0	20891.	-23.8	-38.1	25.	266.5	34.3
600.0	23676.	-30.8	-42.9	29.	269.8	39.3
650.0	26730.	-38.9	-43.2	64.	272.7	44.9
700.0	30150.	-45.2			284.9	42.3
750.0	34099.	-50.5			284.2	52.3
800.0	38837.	-55.0			273.6	54.1
850.0	41663.	-49.2			268.5	51.2
900.0	44936.	-54.1			263.0	47.0
950.0	48739.	-58.5			251.1	52.5
1000.0	53359.	-58.8			242.5	45.6
1050.0	57906.	-63.4			241.4	34.0
1100.0	60596.	-62.7			251.2	29.9
1150.0	63726.	-61.0			249.2	16.7
1200.0	67475.	-56.4			131.2	10.3
1250.0	72086.	-58.7			261.6	49.5
1300.0	76054.	-57.4				

STATION, ALTITUDE 4010.40 FEET NSL
30.10N, 82.1330 WRS NSI
ASCENT/DESCENT, 53

SIGNIFICANT LEVEL DATA
33402.0033
NW 70
TABLE 2

STATION COORDINATES
32.08497 LAT LON
106.49714 LONG ECG

PRESSURE, DYNAMIC
IN MILLIBARS, MSL FEET
ALTITUDE

PRESSURE, DYNAMIC IN MILLIBARS, MSL FEET	ALTITUDE IN FEET	TEMPERATURE AIR, DEGREES CENTIGRADE	TEMPERATURE SURFACE, DEGREES CENTIGRADE	REL. HUM. PERCENT
575.4	4010.4	14.5	1.2	49.1
565.4	4071.9	11.4	-1.9	41.0
565.2	4026.6	7.6	-1.1	36.4
565.0	3981.4	4.7	-0.3	35.0
564.8	3936.9	1.9	-0.1	32.9
564.7	3934.0	-0.4	-0.1	32.8
564.6	3934.0	-0.4	-0.1	32.8
564.4	3946.6	-0.4	-0.6	32.0
560.4	10610.4	-6.2	-14.0	59.0
562.0	11261.1	-5.0	-13.5	58.0
556.1	11764.0	-6.0	-13.1	56.0
538.1	12445.7	-6.2	-17.0	42.0
516.0	13365.5	-7.6	-22.1	30.0
567.1	15234.6	-12.3	-29.3	20.0
546.4	16235.4	-12.0	-32.9	17.0
520.0	16385.7	-19.4	-34.5	13.0
456.4	21493.4	-24.4	-35.9	9.0
445.4	21700.2	-26.1	-35.4	8.0
421.4	22490.2	-29.6	-34.8	8.0
400.0	23706.0	-31.8	-39.5	46.0
325.0	29419.5	-43.7		
300.0	30171.3	-48.6		
270.4	31706.9	-50.0		
250.0	34102.4	-49.5		
211.6	37670.8	-53.2		
200.0	38866.1	-53.7		
186.8	40318.1	-51.0		
166.5	42763.9	-53.9		
158.1	43864.7	-51.9		
150.0	44986.4	-52.6		
123.3	49085.6	-60.6		
103.9	52573.1	-64.0		
100.0	53349.0	-63.1		
96.3	54111.7	-64.0		
80.9	55516.5	-59.6		
88.6	55819.5	-56.3		
72.3	60008.0	-63.8		
70.0	60664.8	-62.3		
66.7	61647.0	-63.4		
63.7	62590.3	-59.0		

STATION ALTITUDE 4010.00 FEET MSL
30 NOV. 82 1330 HRS MST
ASCENSION NO. 33

SIGNIFICANT LEVEL DATA
3340220033
H.W. 30

GEODETIC COORDINATES
32°08'49" LAT DEG
106°49'14" LON DEG

TABLE 10 Cont'd

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
50.0	67609.8	-58.8	
43.5	70490.7	-60.0	
36.3	74255.2	-56.5	

IPPE, AIR
3340220033

GEOMETRIC ALTITUDE IN FEET	PRESSURE IN MILLIBARS	TEMPERATURE IN DEGREES CENTIGRADE	REL.HUM. (%)			SPEED OF WIND (M/S)	DIRECTION OF WIND (DEGREES OF 360)	EFFECT OF THERMOMETER IN SIGHT (DEGREES OF 180)	INFLUENCE OF THERMOMETER IN SIGHT (DEGREES OF 180)
			PERCENT	GM/CURRIC METER	SECONDS AUXILIARY				
4000.0	870.6	14.5	42.0	1050.7	361.9	1.0	000.0	0.0	0.0
4000.0	870.5	14.5	42.1	1049.9	360.5	1.0	000.0	0.0	0.0
4000.0	870.4	14.5	42.2	1049.1	359.1	1.0	000.0	0.0	0.0
4000.0	870.3	14.5	42.3	1048.3	357.7	1.0	000.0	0.0	0.0
4000.0	870.2	14.5	42.4	1047.5	356.3	1.0	000.0	0.0	0.0
4000.0	870.1	14.5	42.5	1046.7	354.9	1.0	000.0	0.0	0.0
4000.0	870.0	14.5	42.6	1045.9	353.5	1.0	000.0	0.0	0.0
4000.0	869.9	14.5	42.7	1045.1	352.1	1.0	000.0	0.0	0.0
4000.0	869.8	14.5	42.8	1044.3	350.7	1.0	000.0	0.0	0.0
4000.0	869.7	14.5	42.9	1043.5	349.3	1.0	000.0	0.0	0.0
4000.0	869.6	14.5	43.0	1042.7	347.9	1.0	000.0	0.0	0.0
4000.0	869.5	14.5	43.1	1041.9	346.5	1.0	000.0	0.0	0.0
4000.0	869.4	14.5	43.2	1041.1	345.1	1.0	000.0	0.0	0.0
4000.0	869.3	14.5	43.3	1040.3	343.7	1.0	000.0	0.0	0.0
4000.0	869.2	14.5	43.4	1039.5	342.3	1.0	000.0	0.0	0.0
4000.0	869.1	14.5	43.5	1038.7	340.9	1.0	000.0	0.0	0.0
4000.0	869.0	14.5	43.6	1037.9	339.5	1.0	000.0	0.0	0.0
4000.0	868.9	14.5	43.7	1037.1	338.1	1.0	000.0	0.0	0.0
4000.0	868.8	14.5	43.8	1036.3	336.7	1.0	000.0	0.0	0.0
4000.0	868.7	14.5	43.9	1035.5	335.3	1.0	000.0	0.0	0.0
4000.0	868.6	14.5	44.0	1034.7	333.9	1.0	000.0	0.0	0.0
4000.0	868.5	14.5	44.1	1033.9	332.5	1.0	000.0	0.0	0.0
4000.0	868.4	14.5	44.2	1033.1	331.0	1.0	000.0	0.0	0.0
4000.0	868.3	14.5	44.3	1032.3	329.6	1.0	000.0	0.0	0.0
4000.0	868.2	14.5	44.4	1031.5	328.2	1.0	000.0	0.0	0.0
4000.0	868.1	14.5	44.5	1030.7	326.8	1.0	000.0	0.0	0.0
4000.0	868.0	14.5	44.6	1030.0	325.4	1.0	000.0	0.0	0.0
4000.0	867.9	14.5	44.7	1029.2	324.0	1.0	000.0	0.0	0.0
4000.0	867.8	14.5	44.8	1028.4	322.6	1.0	000.0	0.0	0.0
4000.0	867.7	14.5	44.9	1027.6	321.2	1.0	000.0	0.0	0.0
4000.0	867.6	14.5	45.0	1026.8	319.8	1.0	000.0	0.0	0.0
4000.0	867.5	14.5	45.1	1026.0	318.4	1.0	000.0	0.0	0.0
4000.0	867.4	14.5	45.2	1025.2	317.0	1.0	000.0	0.0	0.0
4000.0	867.3	14.5	45.3	1024.4	315.6	1.0	000.0	0.0	0.0
4000.0	867.2	14.5	45.4	1023.6	314.2	1.0	000.0	0.0	0.0
4000.0	867.1	14.5	45.5	1022.8	312.8	1.0	000.0	0.0	0.0
4000.0	867.0	14.5	45.6	1022.0	311.4	1.0	000.0	0.0	0.0
4000.0	866.9	14.5	45.7	1021.2	309.9	1.0	000.0	0.0	0.0
4000.0	866.8	14.5	45.8	1020.4	308.5	1.0	000.0	0.0	0.0
4000.0	866.7	14.5	45.9	1019.6	307.1	1.0	000.0	0.0	0.0
4000.0	866.6	14.5	46.0	1018.8	305.7	1.0	000.0	0.0	0.0
4000.0	866.5	14.5	46.1	1018.0	304.3	1.0	000.0	0.0	0.0
4000.0	866.4	14.5	46.2	1017.2	302.9	1.0	000.0	0.0	0.0
4000.0	866.3	14.5	46.3	1016.4	301.5	1.0	000.0	0.0	0.0
4000.0	866.2	14.5	46.4	1015.6	300.1	1.0	000.0	0.0	0.0
4000.0	866.1	14.5	46.5	1014.8	298.7	1.0	000.0	0.0	0.0
4000.0	866.0	14.5	46.6	1014.0	297.3	1.0	000.0	0.0	0.0
4000.0	865.9	14.5	46.7	1013.2	295.9	1.0	000.0	0.0	0.0
4000.0	865.8	14.5	46.8	1012.4	294.5	1.0	000.0	0.0	0.0
4000.0	865.7	14.5	46.9	1011.6	293.1	1.0	000.0	0.0	0.0
4000.0	865.6	14.5	47.0	1010.8	291.7	1.0	000.0	0.0	0.0
4000.0	865.5	14.5	47.1	1009.9	290.3	1.0	000.0	0.0	0.0
4000.0	865.4	14.5	47.2	1009.1	288.9	1.0	000.0	0.0	0.0
4000.0	865.3	14.5	47.3	1008.3	287.5	1.0	000.0	0.0	0.0
4000.0	865.2	14.5	47.4	1007.4	286.1	1.0	000.0	0.0	0.0
4000.0	865.1	14.5	47.5	1006.6	284.7	1.0	000.0	0.0	0.0
4000.0	865.0	14.5	47.6	1005.8	283.3	1.0	000.0	0.0	0.0
4000.0	864.9	14.5	47.7	1005.0	281.9	1.0	000.0	0.0	0.0
4000.0	864.8	14.5	47.8	1004.1	280.5	1.0	000.0	0.0	0.0
4000.0	864.7	14.5	47.9	1003.3	279.1	1.0	000.0	0.0	0.0
4000.0	864.6	14.5	48.0	1002.4	277.7	1.0	000.0	0.0	0.0
4000.0	864.5	14.5	48.1	1001.6	276.3	1.0	000.0	0.0	0.0
4000.0	864.4	14.5	48.2	1000.7	274.9	1.0	000.0	0.0	0.0
4000.0	864.3	14.5	48.3	999.9	273.5	1.0	000.0	0.0	0.0
4000.0	864.2	14.5	48.4	999.0	272.1	1.0	000.0	0.0	0.0
4000.0	864.1	14.5	48.5	998.1	270.7	1.0	000.0	0.0	0.0
4000.0	864.0	14.5	48.6	997.2	269.3	1.0	000.0	0.0	0.0
4000.0	863.9	14.5	48.7	996.3	267.9	1.0	000.0	0.0	0.0
4000.0	863.8	14.5	48.8	995.4	266.5	1.0	000.0	0.0	0.0
4000.0	863.7	14.5	48.9	994.5	265.1	1.0	000.0	0.0	0.0
4000.0	863.6	14.5	49.0	993.6	263.7	1.0	000.0	0.0	0.0
4000.0	863.5	14.5	49.1	992.7	262.3	1.0	000.0	0.0	0.0
4000.0	863.4	14.5	49.2	991.8	260.9	1.0	000.0	0.0	0.0
4000.0	863.3	14.5	49.3	990.9	259.5	1.0	000.0	0.0	0.0
4000.0	863.2	14.5	49.4	989.9	258.1	1.0	000.0	0.0	0.0
4000.0	863.1	14.5	49.5	989.0	256.7	1.0	000.0	0.0	0.0
4000.0	863.0	14.5	49.6	988.0	255.3	1.0	000.0	0.0	0.0
4000.0	862.9	14.5	49.7	987.1	253.9	1.0	000.0	0.0	0.0
4000.0	862.8	14.5	49.8	986.2	252.5	1.0	000.0	0.0	0.0
4000.0	862.7	14.5	49.9	985.3	251.1	1.0	000.0	0.0	0.0
4000.0	862.6	14.5	50.0	984.4	249.7	1.0	000.0	0.0	0.0
4000.0	862.5	14.5	50.1	983.5	248.3	1.0	000.0	0.0	0.0
4000.0	862.4	14.5	50.2	982.6	246.9	1.0	000.0	0.0	0.0
4000.0	862.3	14.5	50.3	981.7	245.5	1.0	000.0	0.0	0.0
4000.0	862.2	14.5	50.4	980.8	244.1	1.0	000.0	0.0	0.0
4000.0	862.1	14.5	50.5	979.9	242.7	1.0	000.0	0.0	0.0
4000.0	862.0	14.5	50.6	979.0	241.3	1.0	000.0	0.0	0.0
4000.0	861.9	14.5	50.7	978.1	239.9	1.0	000.0	0.0	0.0
4000.0	861.8	14.5	50.8	977.2	238.5	1.0	000.0	0.0	0.0
4000.0	861.7	14.5	50.9	976.3	237.1	1.0	000.0	0.0	0.0
4000.0	861.6	14.5	51.0	975.4	235.7	1.0	000.0	0.0	0.0
4000.0	861.5	14.5	51.1	974.5	234.3	1.0	000.0	0.0	0.0
4000.0	861.4	14.5	51.2	973.6	232.9	1.0	000.0	0.0	0.0
4000.0	861.3	14.5	51.3	972.7	231.5	1.0	000.0	0.0	0.0
4000.0	861.2	14.5	51.4	971.8	230.1	1.0	000.0	0.0	0.0
4000.0	861.1	14.5	51.5	970.9	228.7	1.0	000.0	0.0	0.0
4000.0	861.0	14.5	51.6	969.9	227.3	1.0	000.0	0.0	0.0
4000.0	860.9	14.5	51.7	969.0	225.9	1.0	000.0	0.0	0.0
4000.0	860.8	14.5	51.8	968.1	224.5	1.0	000.0	0.0	0.0
4000.0	860.7	14.5	51.9	967.2	223.1	1.0	000.0	0.0	0.0
4000.0	860.6	14.5	52.0	966.3	221.7	1.0	000.0	0.0	0.0
4000.0	860.5	14.5	52.1	965.4	220.3	1.0	000.0	0.0	0.0
4000.0	860.4	14.5	52.2	964.5	218.9	1.0	000.0	0.0	0.0
4000.0	860.3	14.5	52.3	963.6	217.5	1.0	000.0	0.0	0.0
4000.0	860.2	14.5	52.4	962.7	216.1	1.0	000.0	0.0	0.0
4000.0	860.1	14.5	52.5	961.8	214.7	1.0	000.0	0.0	0.0
4000.0	860.0	14.5	52.6	960.9	213.3	1.0	000.0	0.0	0.0
4000.0	859.9	14.5	52.7	959.9	211.9	1.0	000.0	0.0	0.0
4000.0	859.8	14.5	52.8	959.0	210.5	1.0	000.0	0.0	0.0
4000.0	859.7	14.5	52.9	958.1	209.1	1.0	000.0	0.0	0.0
4000.0	859.6	14.5	53.0	957.2	207.7	1.0	000.0	0.0	0.0
4000.0	859.5	14.5	53.1	956.3	206.3	1.0	000.0	0.0	0.0
4000.0	859.4	14.5	53.2	955.4	204.9	1.0	000.0	0.0	0.0
4000.0	859.3	14.5	53.3	954.5	203.5	1.0	000.0	0.0	0.0
4000.0	859.2	14.5	53.4	953.6	202.1	1.0	000.0	0.0	0.0
4000.0	859.1	14.5	53.5	952.7	200.7	1.0	000.0	0.0	0.0
4000.0	859.0	14.5	53.6	951.8	199.3	1.0	000.0	0.0	0.0
4000.0	858.9	14.5	53.7	950.9	197.9	1.0	000.0	0.0	0.0
4000.0	858.8	14.5	53.8	949.9	196.5	1.0	000.0	0.0	0.0
4000.0</									

STATION ALTITUDE 4010.40 FT. T.SL
30 NOV. 02 1330 HRS. AST
ASCENSION NO. 33

UPPER AIR DATA
3340220033
NW 30
TABLE 11 Cont'd

GEODETIC COORDINATES
32.08497 LAT DEG
106.49714 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	STATE OF SOUND	WIND DATA DEGREES (TN)	WIND SPEED KILOTS	INDEX OF REFRACTION
24000.0	594.9	-32.5	-40.8	43.1**	571.6	604.4	262.9	42.6
24500.0	585.3	-33.8	-43.1	38.3**	562.1	602.8	264.8	42.6
25000.0	577.9	-35.1	-45.4	33.4**	552.8	601.2	266.7	43.0
25500.0	569.6	-36.3	-48.0	28.5**	543.7	599.5	268.4	43.9
26000.0	561.6	-37.6	-50.7	23.6**	534.7	597.9	269.2	46.3
26500.0	553.7	-38.9	-53.7	18.7**	525.9	596.3	268.9	50.5
27000.0	545.0	-40.1	-57.2	13.9**	517.2	594.7	268.6	54.3
27500.0	536.4	-41.4	-61.6	9.0**	508.7	593.1	268.4	57.5
28000.0	531.1	-42.6	-68.3	4.1**	500.3	591.5	268.2	60.7
28500.0	523.8	-43.9	-	-	492.1	589.8	268.7	61.5
29000.0	516.5	-45.3	-	-	483.9	588.0	269.2	61.9
29500.0	509.3	-46.7	-	-	475.9	586.2	269.5	62.7
30000.0	502.4	-48.1	-	-	468.1	584.4	269.6	63.8
30500.0	495.5	-49.5	-	-	459.0	583.4	269.7	65.2
31000.0	280.7	-49.4	-	-	449.4	582.8	269.7	67.3
31500.0	282.1	-49.8	-	-	440.0	582.2	269.9	69.5
32000.0	275.6	-49.9	-	-	430.2	582.0	270.8	72.0
32500.0	269.5	-49.8	-	-	420.1	582.2	271.8	74.5
33000.0	262.1	-49.7	-	-	410.3	582.5	273.2	76.9
33500.0	257.1	-49.6	-	-	400.7	582.4	274.6	79.3
34000.0	251.2	-49.5	-	-	391.3	582.6	275.2	80.3
34500.0	245.4	-49.9	-	-	382.9	582.1	275.2	80.2
35000.0	239.7	-50.4	-	-	375.0	581.4	275.2	80.0
35500.0	234.2	-	-	-	367.2	580.7	274.7	78.0
36000.0	228.8	-51.9	-	-	359.5	580.0	274.0	75.2
36500.0	223.5	-52.0	-	-	352.0	579.4	273.2	72.4
37000.0	218.3	-52.5	-	-	344.7	578.7	272.8	69.9
37500.0	213.5	-53.0	-	-	337.6	578.0	272.5	67.5
38000.0	208.3	-53.3	-	-	330.2	577.6	271.9	65.6
38500.0	203.5	-53.5	-	-	322.8	577.3	269.4	67.0
39000.0	198.7	-53.5	-	-	315.3	577.5	267.2	69.3
39500.0	194.1	-52.9	-	-	307.1	578.1	265.7	73.6
40000.0	189.6	-52.3	-	-	299.1	579.0	265.1	76.0
40500.0	185.2	-52.0	-	-	291.8	579.3	265.5	76.1
41000.0	181.9	-52.5	-	-	285.6	578.7	265.9	76.3
41500.0	177.7	-52.9	-	-	279.4	578.2	266.1	73.9
42000.0	173.6	-53.3	-	-	273.4	577.7	266.1	70.0
42500.0	168.6	-53.7	-	-	267.6	577.1	266.1	66.2
43000.0	164.7	-53.5	-	-	261.1	577.4	265.9	62.3
43500.0	160.8	-52.6	-	-	254.0	578.6	264.6	57.6

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

故其子曰：「吾父之子，其名何也？」

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the *Journal of the Royal Statistical Society* and the *Journal of the Royal Statistical Society, Series B* (Statistical Methodology).

STATION ALTITUDE 9910.40 FT 1st S₁
 30 NOV. 02 1330 hrs, MDT
 ASL ELEVATION 140. 33

UPPER AIR DATA
 3340220053
 NW 30
 TABLE 11 Cont'd

GEODETIC COORDINATES
 32°38'49" LAT DEG
 106°49'14" LON DEG

GEODETIC ALTITUDE MSL ELEVATION	PRESSURE IN MILLIBARS	TEMP, RE DEGREE	TEMP, RE CENTIGRADE	DEWPNT PERCENT	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TH)	WIND SPEED KNOTS	INDEX OF REFRACTION
64000.0	59.5	-58.9				96.8	570.2	236.1	15.1	1.000022
64500.0	58.1	-58.9				94.5	570.2	232.0	14.1	1.000021
65000.0	56.7	-58.9				92.2	570.2	223.5	12.0	1.000021
65500.0	55.4	-58.9				90.0	570.3	212.0	10.4	1.000020
66000.0	54.0	-58.9				87.8	570.3	204.8	9.0	1.000020
66500.0	52.7	-58.8				85.7	570.3	195.9	7.9	1.000019
67000.0	51.5	-58.8				83.7	570.3	198.7	7.6	1.000019
67500.0	50.3	-58.8				81.7	570.4	211.2	8.3	1.000018
68000.0	49.1	-59.0				79.8	570.2	221.4	9.3	1.000018
68500.0	47.9	-59.2				78.0	569.9	230.6	11.3	1.000017
69000.0	46.8	-59.4				76.2	569.6	236.9	13.5	1.000017
69500.0	45.6	-59.6				74.4	569.3	241.1	15.2	1.000017
70000.0	44.5	-59.8				72.7	569.0	245.7	15.8	1.000016
70500.0	43.5	-60.0				71.1	568.8	246.2	16.3	1.000016
71000.0	42.4	-59.5				69.2	569.4	249.5	15.4	1.000015
71500.0	41.4	-59.1				67.4	570.0	254.4	13.5	1.000015
72000.0	40.5	-58.6				65.7	570.6	260.8	11.8	1.000015
72500.0	39.5	-58.1				64.0	571.3			1.000014
73000.0	38.6	-57.7				62.3	571.9			1.000014
73500.0	37.6	-57.2				60.7	572.5			1.000014
74000.0	36.7	-56.7				59.2	573.1			1.000013

CHATHAM FLAT 4610.00 FEET ASL
30 NOV. 82
ASSETTE 1.00 NO. 3

MARSHAL LEVELS

3340220033
NW 10
52°39'43" LAT LEG
106°49'14" LONG LEG

TABLE 12

PRESSURE IN MILLIBARS	TEMPERATURE IN DEGREES CENTIGRADE	AIR DEWPOINT IN DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA SPEED IN KNOTS
1050.0	46.69	11.3	41.	203.0
1000.0	53.17	5.6	49.	211.2
950.0	51.40	1.0	53.7	212.0
900.0	44.45	-4.7	44.9	237.4
850.0	37.63	-9.2	31.1	240.3
800.0	30.81	-13.7	19.1	240.3
750.0	24.00	-18.2	13.1	240.3
700.0	17.19	-22.0	10.1	240.3
650.0	10.38	-24.6	8.1	240.3
600.0	3.57	-27.4	6.1	240.3
550.0	-3.70	-31.2	5.0	240.3
500.0	-12.0	-31.9	1.7	240.3
450.0	-18.4	-34.3	2.3	250.0
400.0	-20.05	-35.4	38.	256.0
350.0	-23.79	-31.8	49.	261.7
300.0	-26.19	-39.5	16.**	266.0
250.0	-30.14	-44.6	1.4	269.7
200.0	-34.01	-49.5	275.2	290.3
187.76	-38.76	-53.7	267.7	290.3
175.0	-41.606	-53.0	266.4	272.4
163.0	-44.669	-52.6	259.1	245.2
152.0	-48.668	-50.0	249.7	242.3
140.0	-53.128	-53.1	142.4	245.7
136.0	-57.54	-50.1	197.5	244.7
130.0	-60.61	-52.3	239.4	144.6
120.0	-63.666	-59.0	237.2	125.3
110.0	-67.360	-58.8	212.9	80.4
100.0	-71.946	-58.4		

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.